ANALYSIS OF FACTORS INFLUENCING ENERGY CONSUMPTION AT AN AIR FORCE BASE

I. Introduction

General

Reducing energy consumption has long been a stated goal of the Department of Defense (DoD). DoD is the largest single energy consumer in the United States; the department consumes 1.6 percent of the total in this country, and approximately 85 percent of the energy consumed by the federal government (Drezner et al, 1994). While energy costs only comprise a small part of DoD's operating expenses, the cost is still significant. Management of energy consumption is of particular interest to base engineering organizations, as utility costs generally are the largest single expense in their annual operating budget. Energy conservation has been an issue since the crisis precipitated by the 1973 oil embargo by the Organization of Petroleum Exporting Countries (OPEC), and has continued to receive attention from Congress and the executive branch since then. It is likely to continue to be an issue as installations strive to improve their pollution prevention efforts, of which energy conservation is a subset. Certainly, energy conservation is sure to be an area of concern for base engineering personnel in DoD for the foreseeable future.

Air Force energy managers face many challenges in performing their duties at the installation level, as well as at higher levels. The Air Force operates hundreds of installations worldwide, in a wide variety of environments. Some bases are located in extremely cold, even arctic, conditions. Most of the energy consumed at these bases is used to heat the base facilities. Others, in hot climates, use the majority of their energy for cooling, both for the comfort of personnel and to avoid damaging sensitive equipment. Likewise, the source of energy purchased

by the installations varies widely with location. Many bases in cold climates operate central heating plants, which serve a number of buildings, in order to increase efficiency. Many of these use coal as their energy source. Some installations have a large number of heating systems which consume fuel oil, although most are attempting to switch to natural gas. All installations use electricity, and much of the conservation effort has been in this area.

While DoD and the Air Force have been practicing energy conservation for over 20 years, not enough is yet known about the factors which influence energy consumption. If the Air Force is to meet the aggressive goals which have been set for reducing energy consumption in the future, we must continue to search for factors which influence energy consumption so that we can more effectively operate our installations with limited resources.

Background

Energy consumption in the DoD has been an issue of concern to leaders since the Arab oil embargo of 1973. In the period preceding that time, the United States had become increasingly dependent on imported oil, the majority of which originated in the Middle East. In 1973, the OPEC imposed an embargo on oil exports in retaliation for the United States' support of Israel in the Yom Kippur war. The result was widespread energy shortages which impacted much of the United States.

Between 1950 and 1973, the price of energy actually decreased in terms of real dollars. The price of residential electricity fell by 55%; gasoline by 21%; and natural gas by 20%. As a result, following the laws of supply and demand, energy consumption increased. Over the period mentioned above, per capita electricity use increased by 350%; natural gas consumption increased by 60% (Buttolph, 1982).

Beginning in October of 1973, and continuing through March 1974, OPEC countries reduced oil production, and imposed embargoes on specific countries, including the United States. From September to November of 1973, the supply of oil from Arab nations was reduced by over 4 million barrels per day. The fact that this quantity amounts to less than 8% of world oil production is indicative of the fact that there was not much spare production capacity at that time; hence the OPEC countries were able to exercise a high degree of control over the level of reductions imposed on importers as a group (Krapels, 1980).

Following the oil embargo, the reduced supply of oil, as well as its increased prices, caused energy consumption to decline rapidly. Over the two year period from 1973 to 1975, per capita energy use in the United States declined by 7%, and total use declined by 5%. (Buttolph, 10) This is especially significant when one considers the changes that would have occurred in order to precipitate this change. Many of the changes which would occur later, and which would be encouraged by national policies, involved making changes in facilities, vehicles, and utilities to make them more energy efficient. However, these are long term changes, and two years is insufficient time to implement them to any degree. Hence, these figures show that Americans were taking the energy crisis seriously, and were changing their behavior patterns as a result.

The federal government, following the lead of other American consumers, began to take measures to change its behavior patterns soon after the crisis. The first major piece of legislation to address energy consumption in federal facilities was the Energy Policy and Conservation Act (EPCA) of 1975. While including few details about how to achieve energy savings, EPCA directed the President to develop a comprehensive energy management plan.

At the same time, the Defense Energy Information System (DEIS) was established. DEIS provided a means to centrally manage energy information from all Department of Defense (DoD) installations. Quantities of energy consumed are reported monthly and are broken down by energy type. Some factors which may drive energy consumption are also reported. DEIS is broken down into two subsystems: DEIS I, which manages petroleum products used to support transportation, training, mobility, and readiness requirements; and DEIS II, which manages consumption data for the installations' physical plants.

The separation here is important; the consumption tracked by DEIS I was consumption largely driven by external forces such as mobility commitments. While operating more efficiently was made a goal, in many cases to do so is impossible due to mission requirements. Mobility energy has historically comprised 75 to 80 percent of total DoD energy consumption (Drezner et al, 1994). Facility energy consumption (the DEIS II data) generally comprises only 20 to 25 percent of the total (Drezner et al, 1994); however, much of the focus of energy conservation efforts is in this area. A third category, industrial facilities energy, is also included in the DEIS II data. Some installations, such as depots, operate specialized equipment used for repairing or overhauling equipment, and the energy consumed by this equipment is reported separately from that used to support the facilities themselves. Historically, the energy consumed by industrial process equipment comprises less than 5 percent of total energy consumption (Drezner et al, 1994). So, with the advent of DEIS reporting less than two years after the beginning of the energy crisis, DoD energy managers acquired a useful tool for managing energy conservation efforts.

In 1977 Congress passed the Department of Energy Organization Act (DOEOA). This act established a management committee consisting of an assistant secretary or assistant administrator from all major federal departments and agencies. The intent of the formation of this committee was to provide a forum to focus on national energy conservation issues rather than issues specific to one department or agency.

Also in 1977, President Carter issued Executive Order (EO) 12003, which set forth the first energy consumption reduction goals for federal facilities. The goals stated were to develop a conservation plan which would reduce energy consumption in existing facilities by 20 percent between 1975 and 1985. Also, a goal was set to reduce energy consumption by 45 percent in all newly constructed facilities.

The National Energy Conservation Policy Act (NECPA) of 1978 built upon some of the provisions of the EPCA of 1977. Whereas EPCA was very general and contained few details concerning how to implement an energy conservation policy, NEPCA contained some specific instructions. One such instruction specified the use of a life cycle costing methodology as the basis of energy policies. Also, facility energy audits were mandated for all facilities whose size exceeded 1000 square feet.

In 1988, the Federal Energy Management Improvement Act (FEMIA) established new goals as a follow-on to those established by EO 12003. The goals were to reduce energy consumption in federal facilities by 10 percent between 1985 and 1995. This act also marked the first time that a level of savings was specified for energy expenditures.

The National Defense Authorization Acts (NDAA) for the years 1989 through 1991 provided an incentive for installation-level commanders and managers to reduce their

consumption by allowing them to retain a portion of the funds saved by energy conservation measures. This provision of the NDAA also promoted continuing funding of energy conservation programs by requiring that two-thirds of the funds retained be spent on additional energy conservation programs; the remaining funds could be used at the installation commanders' discretion for base improvements or to improve morale.

EO 12759 was issued in 1991. It contained revised federal facility consumption goals, requiring a 20 percent reduction from 1985 to 2000. It also required a 20 percent reduction in energy consumption at industrial facilities by 20 percent during the same period.

The most recent legislation to address federal energy consumption, The Energy Policy Act (EPA) of 1992, contains a long list of specific instructions directing federal agencies to undertake specific actions to reduce their energy consumption.

In the future, it is likely that energy consumption will be addressed in terms of pollution prevention in addition to the current emphasis on reducing energy consumption in order to meet fiscal and resource constraints. This will bring a new set of players into the energy management arena, as current energy policies are generally implemented through the DOE. Many of the pollution prevention policies are implemented through the Environmental Protection Agency, and it remains to be seen what effect this potential sharing of responsibility would have on energy management within DoD.

This brief overview of the impact of the crisis brought on by the OPEC oil embargo of 1973, and its effect on federal energy conservation policy, shows how the emphasis has increased over the last twenty-two years. Energy conservation originally began as a reaction to reduced petroleum supplies and the effects of these reductions upon energy prices. The goal of the

conservation policies was twofold: first, to reduce the energy requirements of the federal government and its vulnerability to pressures from overseas suppliers; second, to reduce operating costs for all federal facilities by reducing the amount that must be spent on energy to maintain those facilities.

Problem

The DoD has set a goal of reducing facility energy consumption per square foot of floor space by 20 percent by the year 2000, using 1985 as a baseline. Initially, progress was able to keep up with the goal. However, in recent years that progress has slowed (Nelson). Currently, the Air Force Civil Engineering Support Agency (AFCESA) is unsure what is causing the slowdown.

The issue of energy consumption will be receiving more attention in the future, as the EPA of 1992 and EO 12759 have mandated additional goals and management actions. The types of programs available to energy managers have become much more aggressive in recent years. Programs such as Shared Energy Savings (SES) contracts, in which no initial investment on the part of the government, have become more commonplace--the contractors agree to receive a portion of the funds saved by improvements made to facilities as payment for making the improvements. Energy audits have received more emphasis as well. The Department of Energy (DOE) was required by the Energy Policy Act of 1992 to establish energy audit teams and make them available to other agencies.

Although these programs and others will be a great help to energy managers and to commanders who wish to reduce energy consumption at their installations, it is likely that the returns from such programs will diminish over time. This is due to the fact that most of the

changes which can provide a large energy savings for a relatively small investment will be prioritized and funded early on; the remaining improvements will most likely be harder to identify, prioritize, and fund.

The goals which have been set are to be applied to all bases in an identical fashion; all bases are to reduce their energy consumption by 20 percent by the year 2000. However, there may be factors beyond the control of commanders and Base Civil Engineer personnel that may make the task of reducing consumption easier for some bases than for others. This is especially true as the programs mandated by the Energy Policy Act of 1992 take effect and the high value/low investment improvements are made at various Air Force facilities. Once these are made, further improvements that may be necessary in order to equalize energy consumption among various facilities may require a higher capital cost, which may or may not be available.

If this is the case, knowledge of the factors inherent to a given facility that influence energy consumption will be of great value to both base level personnel and personnel at higher levels who must compare bases' energy conservation performance. For example, if per-square-foot energy consumption is driven by the number of aircraft assigned to a base, and the number assigned to a given base is reduced, then that base should reduce their energy consumption by more than the 20 percent goal. Conversely, if the number assigned is increased, they should not be required to meet the goal of 20 percent reduction, but rather some lesser goal. A more equitable means of setting goals would be to determine what factors drive per-square-foot energy consumption, and then to use these factors to generate activity indices which would create base-specific goals. While the DoD would still reduce overall energy consumption by 20 percent by the year 2000, more of the burden would be borne by bases which are more capable of reducing

their consumption. This knowledge could also be used during future base closure decisions, because it would be advantageous to close a base at which energy use reduction is more difficult.

Knowledge about which factors most influence energy consumption would also be useful for factors which are under the control of base personnel. Base Civil Engineer organizations generally are resource-constrained; managers must constantly make decisions regarding the prioritization of competing uses for money, manpower, and materiel. By spending his limited energy conservation resources on items which will have a maximum impact on energy consumption, a manager will be able to maximize the use of these resources.

Objectives

This thesis will have two objectives. The first objective will be to identify certain inherent characteristics of DoD installations which influence facility energy consumption. These characteristics may be either quantitative, as in square feet of facility floor space, or qualitative, as in which command operates a particular base.

The second objective will be to use these factors to develop a model to predict energy consumption at an Air Force base. The predictions developed by this model could then be used for either planning or baselining purposes.

Scope

This thesis will consider only bases located in the continental United States (CONUS). The energy consumption figures obtained through AFCESA personnel will be assumed to have been accurately reported. Also, the energy purchased during a given month will be assumed to have been consumed during that same month. This is a straightforward assumption for electricity

and natural gas purchases, but is not so for coal and fuel oil, which may be stockpiled. The data from fiscal years 1991 through 1994 will be considered.

II. Literature Review

Introduction

Before describing the methodology used in this thesis to analyze factors which influence energy consumption at Air Force bases, a review of previous efforts to identify similar factors at military installations is necessary. Several studies have been completed in the Department of Defense following the 1973 oil crisis; the scopes of these studies varied widely. These studies can be generally categorized as macro or micro scale, and as type-specific or type-nonspecific.

Macro scale studies involve data gathered on an installation level from a wide number of installations, and generally do not include energy data gathered on a facility-by-facility basis. Some macro scale studies, while considering installation-level energy consumption, were limited to specific types of installations. Micro scale studies, on the other hand, include data from a relatively small number of installations, and consider energy consumed by each individual facility in the study.

Type-specific studies consider energy of only one type, such as electricity, natural gas, coal, or heating oil. Type-nonspecific studies, conversely, convert energy consumed in all types to a common unit, usually million British thermal units (MBTU).

A search of literature reveals that no studies have been done to date to attempt to develop factors which influence Air Force installations' energy consumption on a macro scale and type-nonspecific level. However, previous research efforts have contributed to a knowledge base of factors which are highly likely to influence consumption, and also provide several factors which will be considered as candidates in this thesis.

This literature review will consider only those studies which relate primarily to facility energy consumption. A number of studies have also been done which attempt to predict consumption of petroleum distillates for readiness or mobility purposes. Consideration of those types of energy consumption is beyond the scope of this thesis.

Results of Other Department of Defense Studies

U.S. Army. The U.S. Army has been active in researching factors influencing facility energy consumption since shortly after the 1973 oil crisis. Through both the Facilities Engineering Support Agency and the Construction Engineering Research Laboratory, several studies have been accomplished on various levels.

1977. This, the first energy consumption study published by the U.S. Army Corps of Engineers, was a macro scale, type-specific study which considered heating oil delivery data for buildings at three Army installations in the Washington, D.C. area (Botros, 1977). The objective of this effort was to identify the building types which are the largest consumers of heating energy, and therefore have the greatest potential for application of conservation measures. Using fuel oil consumption data ensures that the energy will be used only for a specific facility, as each facility generally has its own heating oil storage tank.

Twenty-four different types of buildings were identified for the study; monthly fuel oil delivery data were collected for fiscal years 1975 and 1976. Using this data, heating consumption for each building type was computed in British thermal units (BTU) per thousand square feet per year. The results of the study are given in table 2-1. The types of facilities which were the largest consumers of energy were found to be maintenance and community service facilities. These facilities generally have high ceilings and, in the case of

Table 2-1
Ranked Consumption by Consumer Group (Botros, 1977)

Rank	Building Type	Heating Consumption BTU x $10^3/ft^2$/year
1	Fire Station	323*
2	Museum	302*
3	Theater	213
4	Gymnasium	213*
5	Band Auditorium	210*
6	Motor Repair Shop	176
7	Field House	169*
8	Chapel	156
9	Enlisted Barracks	136
10	General Instructional Building	123
11	Library	117*
12	Post Exchange	106
13	Officers' Mess	102*
14	Bachelor Officers' Quarters	102
15	Enlisted Mess	101
16	Laboratory	100
17	Recreation Center	99
18	Warehouse	93
19	Enlisted Barracks with Mess	89
20	Administrative Office	86
21	Officers' Family Housing	85
22	NCO Family Housing	64
23	Commissary	41
24	Bowling Alley	36*

*Denotes single sample

maintenance facilities, large bay doors which allow the escape of heated air when opened.

While providing a good deal of insight into which facilities require the most heating energy, this study was too limited in scope to allow application of its results to installations other than the three considered. It did not consider heat from sources other than fuel oil. Also, the three installations studied were in the same geographic area; the results could be different in

another climate. For some of the building types, and for half of the ten highest consumers, only one sample was obtained. Finally, only heating energy was considered. While information concerning heating energy is useful, for many of the types of buildings identified the amount of energy used for cooling could equal or exceed that used for heating. Nonetheless, the information identified is valuable and shows that there are wide variances in the amount of energy used among different building types.

1979. In 1979 the Army published the results of a study of facility energy consumption begun in 1976 (Sliwinski et al, 1979). There were three goals of this study: "(1) to collect data relating to the flow, demand patterns, and uses of the various forms of energy consumed on Army installations, (2) to compile a data file for use in later analysis, and (3) to analyze the collected data to determine how the energy was consumed, identify conservation measures, and improve energy utilization."

This study was conducted as a micro scale, type-nonspecific study. Three Army installations were studied: Fort Belvoir, Virginia; Fort Carson, Colorado; and Fort Hood, Texas. These posts were chosen for their dissimilar sizes, missions, and geographic locations. The facilities on each installation were divided into consumer groups based on the Army's real property inventory system. Seven major categories were used: troop housing, family housing, administration and training, medical and dental, community support, storage, and production and maintenance. A total of 114 buildings were selected for the study. An effort was made to select similar buildings at each of the three locations in order to assess the effects of climate and operational variation on energy consumption. Equipment was installed at each facility to monitor both electricity and heating energy consumption. In addition, the local weather was monitored in

order include information concerning heating degree days (HDD) and cooling degree days (CDD) in the analysis of the data. A heating or cooling degree day is defined as the departure of daily mean temperature from 65 degrees Fahrenheit. If the daily mean temperature is below 65 degrees, then the difference is expressed in heating degree days; if it is higher, then it is expressed in cooling degree days. Degree days (heating or cooling) may be summed to produce quantities such as monthly heating/cooling degree days.

The data used in the report were collected between September of 1976 and January of 1978. The results of this study in terms of average annual energy consumption by consumer group are shown in Table 2-2. In this table, as in the original report, two of the seven categories are further broken down into subcategories. Troop housing was divided into three groupings: "old" barracks, which were constructed prior to 1966; "new, nonmodular" barracks, which were constructed after 1966 but do not conform to the new modular design; and "new, modular" barracks, which represented the Army's current design at the time the report was written. Community facilities were divided into two categories: clubs/commissaries, and fieldhouses/gymnasiums. This distinction was made for heating energy only, and thus is likely an effort to take into account the large open spaces in the latter category. The largest consumers of heating energy, as determined by this study were modular barracks, community facilities, maintenance facilities, and medical/dental facilities. Maintenance and community facilities were also found to be among the highest consumer groups in the earlier study of heating energy by the Army Facilities Engineering Support Agency.

One characteristic of this study which distinguishes it from the previous one is that it develops a predictive capability. For each category of building, a regression equation was

Table 2-2
Average Annual Energy Consumption by Consumer Group (Sliwinski et al, 1979)
(Energy/ft^2/year)

Building Type	Heating (MBTU)	Electric (KWh) Air Cond	Non-Air Cond
Family Housing	1.27	8.49	6.06
Troop Housing			
Old	1.18	N/A	2.37
New, nonmodular	.63	7.96	5.55
New, modular	2.59	N/A*	5.55
Administration/Training	1.12	12.37	
Community Facilities		24.49	
Fieldhouses/gyms	1.70		
Clubs/Commissaries	1.40		
Maintenance	2.08	9.82	
Medical/Dental	2.00	15.99	
Storage	1.73	5.04	

*Cooling supplied by central plant.

developed which could be used to predict energy consumption at other installations using square footage of each type of building, as well as HDD and CDD. Prediction of energy consumption at the installation level would require a detailed inventory of the number of square feet of each type of facility. The accuracy of such a prediction would depend on the similarity of the installation's buildings to those used in this study, and the prediction would not account for energy that is consumed by systems not associated with any particular facility, such as water pumps and street lights.

1980. The objectives of this study were to "(1) describe how electrical energy is being used on military installations, (2) describe the major causes for changes in electrical energy usage, and (3) suggest operational changes and equipment techniques that will reduce electrical

energy consumption which Facilities Engineers can use to plan and execute effective electrical conservation programs." The study was a micro scale, type-specific one (Windingland, 1980).

Two Army installations were used in this study: Fort Carson, Colorado, and Fort Belvoir, Virginia. The data gathered for this report consisted of two distinct types: consumption data for twenty buildings on the two installations, collected on both an hourly and a monthly basis; and electrical feeder consumption, collected on both a daily and monthly basis. The feeder data was collected for Fort Carson only, and measured the total electrical consumption on the eight feeders which distribute commercially obtained electricity to the various areas of the installation.

The feeder data were initially collected in order to try to identify the major consumers of electricity on the installation by area; however, this was not possible due to the wide month-to-month fluctuations in feeder consumption. The daily consumption figures were used to determine what portion of the installation's electrical consumption can be considered "baseline" and what portion is due to operational activity. This was accomplished by comparing the consumption on a Sunday (when it can be assumed that most buildings are unoccupied) to consumption on a Tuesday. Based on this data, the report stated that approximately 70 percent of an installations electrical consumption is due to baseline activities; the remaining 30 percent is due to operational activity.

The individual facilities monitored were located at both Fort Carson and Fort Belvoir. For each building, the monthly electrical consumption, weekday and weekend daily consumption, and hourly minimum and maximum demands were measured. From this data, the results of the feeder measurements were confirmed; that is, a major portion of a building's energy consumption takes place during unoccupied or nonduty hours. Although the seasonal data were collected in the

hopes of establishing a trend for higher consumption during the heating or cooling season, there did not appear to be any significant trends. Some buildings evidenced higher consumption during the summer months (which is to be expected due to air conditioning equipment), but others had a higher consumption during the winter, and some buildings evidenced no seasonal trend whatsoever.

The main conclusion drawn by this study is that the minimum electrical demand of a facility, which may account for as much as 70 to 75 percent of its total consumption, is not related to building occupancy. Rather, this portion of electrical demand can be attributed mainly to heating and cooling system operation. This model did not attempt to develop a predictive capability; rather, it failed to validate building occupancy as a factor which influences energy consumption at an Army installation.

1986. This study attempted to correlate the effects of production level and other measures of level of activity to energy consumption at these facilities (Sliwinski, 1986). This study was macro scale and type nonspecific, although the scope was limited in that only AMC installations were considered. It was undertaken because although energy consumption within AMC declined by 26 percent between 1975 and 1981, the level of production decreased during the same period as well. It was felt that some means of tying energy consumption to level of production was necessary in order to accurately measure the effectiveness of energy conservation measures.

Energy consumption data was gathered for the period 1975 through 1983, as well as data regarding weather and process parameters at each installation. Multiple regression analysis was used to develop prediction equations for both the individual installation level and for the entire

command. It was found that the estimates for the entire command were generally more accurate, probably because of the averaging effect of having a large number of installations within the population.

Two distinct groups of installations were noted. For the first group, only heating degree days seemed to have a significant influence on energy consumption; for the second, heating degree days and the size of the labor force had influence. The author felt that his model could enhance evaluation of energy conservation programs by allowing prediction of energy consumption at an AMC installation, but at least in the case of the first group it appears that the goal of finding a link between production level and energy consumption at AMC installations was not achieved.

U.S. Navy

This effort was intended to improve the methods used to evaluate progress toward energy conservation goals (Buttolph, 1982). It involved data collected from Naval Regional Medical Centers (NRMCs) and considered the effects of both seasonal weather variations and of categories of use on total energy consumption. This was a macro scale, type-specific study. It considers only electricity use, although it continually refers to electrical consumption as energy consumption as though all energy types have been considered. Also, while this is a macro scale study because it considers the aggregated energy consumption for each NRMC, these are somewhat specialized installations and could not be considered to be representative of Navy installations.

The data base used consisted of monthly electrical consumption data from twelve NRMCs located in various climates. The data was collected during fiscal year 1975, which was also the baseline year for the first mandatory conservation efforts within the DoD.

The study was conducted in two phases. In the first, regression models and time series analysis were used to develop forecasting models for energy consumption. The regression model chosen as the best model used heating degree days (HDD), cooling degree days (CDD), and precipitation as independent variables. Average monthly temperature was also considered as an independent variable, but was not included in the model for simplicity, and also because it was strongly correlated with both heating degree days and cooling degree days.

The second phase of this study attempted to forecast energy use as a function of the areas of different types of functional uses of total floor space. Ten categories were created to account for the different uses of floor space within the NRMCs: mission (hospital space), personnel living space, maintenance/industrial, data processing, administrative, commercial, morale and welfare (community services), morale and welfare (recreation), and storage. Regression was then performed using all ten categories as independent variables, and the number of categories used in the model was reduced. The study found that a model using only three of the categories, mission, storage, and maintenance/industrial would provide satisfactory results. However, it also stated that the data base used was too small to support a test for all ten categories of use.

The results of this limited study show, first, that climatic conditions strongly influence electrical consumption at NRMCs, and also that certain types of use category contribute more to electrical consumption than do others. This corresponds to the conclusions drawn by the Army studies. Only one of the three use categories used in the three-variable model was identified by

the Army studies as being a high energy consumer, maintenance/industrial. This author feels that this may be due to the fact that NRMCs are more specialized facilities, while the facilities considered by the Army studies are parts of much larger installations. Still, the information provided by this study is valuable in that it clearly supports a belief that the use of a given amount of floor space to some extent determines the rate at which it will consume energy.

Defense Logistics Agency

This study's goal was to develop a methodology to develop energy consumption goals based on factors which may vary from month to month, rather than the method then in use of basing consumption goals on the previous year's consumption. The study was a macro scale, type-nonspecific one, although it also broke energy consumption down into electric and non-electric, as well as total energy usage (Defense Logistics Agency, 1988).

Three years of monthly energy consumption data were used for this effort. The factors considered were developed by surveying all Defense Logistics Agency (DLA) installations which were accountable for their own energy use to determine what factors the installation managers felt influenced their energy consumption. These factors were then evaluated using regression, and the factors which did not have a significant impact were discarded.

The result of the regression analysis was that the models which were developed produced confidence intervals which were uselessly large, and therefore could not be used in setting energy consumption goals. However, the models did show that a definite relationship exists between climatic and workload factors and energy consumption. This somewhat contradicts the findings of the 1980 CERL study, which found that most of a facility's energy is consumed during unoccupied periods. This could be due, however, to the fact that DLA facilities are more likely to

involve energy-intensive industrial processes. The consumption of these processes may equal or exceed that of the heating, ventilating, and air conditioning (HVAC) equipment that the CERL study found accounted for the majority of the baseline energy consumption.

U.S. Air Force

1980.This was one of the earliest facility energy studies published by the Air Force Institute of Technology (AFIT) (Hatch and Mansfield, 1980). The objective was to examine the possibility of providing energy self-sufficiency for the five Air Logistics Centers (ALCs). The ALCs are relatively large, highly industrial facilities where overhauls and major repairs are performed on aerospace vehicles. In order to determine future requirements for achieving energy self-sufficiency, the authors developed a prediction model using data from all five ALCs. This study can be considered to be macro scale since it considers all energy consumed by each ALC, and type-nonspecific because it aggregates all energy consumed at each ALC regardless of source.

Monthly energy consumption data were gathered for the period from July 1975 through September 1979 for each ALC. These figures were then consolidated to produce an overall energy consumption figure. The energy consumption for the ALCs, measured in MBTU, was taken to be the dependent variable, and five independent variables were considered: square footage of floor space; heating degree days; cooling degree days; manmonths worked; and capital investment. These quantities were also consolidated for all ALCs to correspond to the consolidated energy figures. The first three independent variables were chosen for obvious reasons, and had been considered by earlier Army studies. Mandays worked was chosen to try to incorporate a level of activity indicator for the ALCs, and in this way to account for that portion

of energy used to support industrial processes. Capital investment was chosen to represent additional loads added to each ALC, whether in the form of additional space, or of additional process or industrial equipment.

The result of this analysis was that heating and cooling degree days were found to have the most significant influence on energy consumption at the five ALCs. The model presented by the authors uses only these factors to predict energy consumption for the ALCs. The authors state that the majority of energy consumed by the ALCs is for industrial processes rather than for heating and cooling, so these results are somewhat surprising; if their statement were true then manhours could be expected to influence energy consumption if it is a valid indicator of level of activity. However, the Army's 1980 study of Fort Belvoir and Fort Carson supports the authors' claim. As mentioned previously, that study determined that up to 70 percent of an installation's energy consumption was not tied to occupancy of its facilities, but instead was a baseline level, mainly consisting of HVAC loads. While the study of ALC energy consumption may be a special case since these are highly industrialized installations, that both studies agree strongly supports heating and cooling degree days as drivers of energy consumption.

1981 (Weck, 1981). This study of installation electrical energy consumption examined bases from various commands rather than limiting the study to one. It was a macro scale, type specific study which attempted to develop a multiple linear regression model to forecast electrical consumption at Air Force bases. The study considered heating and cooling degree days, total square footage of facilities, and base population as prospective independent variables, and used data from fifteen bases located in the continental United States. The bases were chosen specifically for their varying sizes and climates, and also represented three different major

commands. Monthly consumption data was gathered for the seven years between fiscal year 1975 and 1981.

Although energy consumption figures for military family housing (MFH) are recorded and reported separately in the DEIS II system, they were combined with other consumption figures for this study. The base population figures used for this study consisted of all assigned military and civilian personnel, Non-Appropriated Fund employees, contractor personnel, and all dependents residing in MFH.

The results of this analysis were that of the four factors considered, only heating and cooling degree days were found to be valid for use in a model to predict electrical consumption at an Air Force Base. Neither base population nor total facility square footage were found to be valid factors. That total facility square footage was not found to be a useful predictor is probably due to one of the assumptions that was made for this effort: that all facilities making up the total square footage of a base consume electricity at equal rates.

1981. Published at the same time as the one discussed previously, this was a study to develop a forecasting methodology for coal, heating oil, and natural gas consumption for Air Force bases (Tinsley, 1981). The same four parameters (heating degree days, cooling degree days, square footage, and base population) were used for this study as for the last one. Data from eight bases was used, and as in the previous study they were chosen for their differing sizes and climates. The data was gathered over the same period, from fiscal year 1975 to 1981. Both this effort and the previous one relied heavily on data from the DEIS II program for the dependent variable. The study was a macro scale, type-specific one, because although it considered multiple energy types, it excluded electricity.

This study uses multiple linear regression, as well as the more advanced techniques of moving averages and exponential smoothing, to try to develop a model to predict consumption of these heating fuels at Air Force bases. The objectives were to first find the most appropriate method for predicting heating energy consumption, then to identify which of the four parameters are most important, and finally to develop a model which may be used by energy managers to predict future consumption.

The study found that multiple linear regression was the most appropriate forecasting technique, and that the use of all four variables in the prediction model produced the most practical model and the best results. Both this study and the previous one noted also that there were relationships among the independent variables, especially heating and cooling degree days. A high number of heating degree days would indicate a cold climate and thus a likelihood of fewer cooling degree days. Conversely, a hot climate would likely produce many cooling degree days and fewer heating degree days. The models developed by these two studies may be of limited use separately since one considers only heating energy and one considers only electricity, but used together they may enable fairly accurate predictions. The feasibility of combining the two models has not been examined.

1983. This effort sought to evaluate the effectiveness of Energy Management and Control Systems (EMCS) as a conservation measure (Boulware and Williamson, 1983). (For readers unfamiliar with EMCS, it is a system which automates the operation and control of HVAC systems and theoretically ensures that they are operated in an energy efficient fashion. They may consist of centrally located computer equipment, as well as remote sensors and electromechanical HVAC controls). In order evaluate EMCS's effectiveness, it included development of a multiple

linear regression model for energy consumption. This was a macro scale, type-nonspecific study which used data from twelve bases (eight with operational EMCSs) to develop a model to predict energy consumption. The authors then compared these predictions to actual energy consumption to determine whether any actual savings were realized.

Data was collected for the period from October 1974 to September 1982. The following factors were considered as possible drivers of energy consumption: heating degree days, cooling degree days, population, total square footage, number of EMCS sensor/controller points, number of buildings controlled by EMCS, and dollar value of energy projects. A dummy variable was also used to represent the presence or absence of an operational EMCS system. The role of the dummy variable will be explained in a later chapter.

The result of this study's multiple linear regression analysis was that five variables were identified as having a significant influence on energy consumption. They are, in decreasing order of significance: heating degree days, cooling degree days, population, dollars value of energy projects, and total square footage. Also, EMCS was found to contribute to energy conservation efforts, although it appears that as little as one percent savings may be attained. Also, some of the data seemed to indicate that energy consumption at ALCs may be tied more closely to industrial processes than to facility energy consumption. The data for McClellan AFB, which is an ALC, indicated that energy consumption there has risen steadily over the period of the study. This is a contrast with all of the other (non-ALC) bases, whose energy consumption declined.

1985. Another AFIT study, this one sought to evaluate the effectiveness of the then-current method of measuring energy conservation progress (Morrill, 1985). This was a macro scale, type-nonspecific study which used data from 77 Air Force bases. Annual energy

consumption data was gathered for the period from 1980 to 1984. Fifteen independent variables were selected for multiple linear regression analysis. These are shown in Table 2-3.

This effort differed from previous Air Force efforts in two important ways. First, it considered total annual consumption rather than the monthly consumption considered by most previous studies. The advantage of this approach is that it may reduce the impact of seasonal fluctuations caused by the switch from heating to cooling seasons. The second way that it differs is that in addition to the actual values of quantities such as heating and cooling degree days, it also considers the impact of changes in these quantities. It also considers the representativeness of CDD and HDD values for each installation in the baseline year of 1975, since consumption in that year was being used for comparison at the time this thesis was written. This was accomplished by comparing the values with climate data for the installations.

The result of this study's multiple linear regression analysis is that nine of the fifteen independent variables were determined to significantly affect energy consumption at an Air Force Base; these nine variables are identified in Table 2-3. One interesting note is that bases which belonged to Tactical Air Command (TAC) were found to have more successful energy conservation programs than other commands' bases. Overall, the regression model for energy consumption developed by this thesis only accounted for approximately 25 percent of the variability in bases' energy consumption. It also concluded that the current method of measuring bases' energy conservation progress, i.e. comparison to a baseline, does not provide a true indication of energy conservation efforts. There are many independent factors which drive energy consumption, and a model should be developed to try to include them in energy consumption projections.

Table 2-3
Selected Independent Variables (Morill, 1985)

Dependent Variable	Energy Conservation (percent reduction in MBTU per square foot)
Candidate Independent Variables	Major Command[**] Climatic Zone Base Mission[**] Cooling Degree Days[**] Heating Degree Days Base Population Costs of Completed ECIP[*] Projects[**] Costs of Completed EMCS Projects[**] Total Square Footage[**] Cooling Degree Day Change Heating Degree Day Change Base Population Change Total Square Footage Change (from baseline)[**] Baseline Cooling Degree Day Change[**] Baseline Heating Degree Day Change[**]
	[*]Energy Conservation Investment Program. This is a means of funding EMCS and building/HVAC retrofit projects through the Military Construction Program.
	[**]Factors found to be significant after multiple linear regression analysis.

Conclusions

The various studies which have been performed by the various DoD agencies over the last two decades have been successful in identifying many of the factors which influence energy consumption at military installations.

In all studies in which they were considered, climatic factors were found to have an influence on energy consumption. This result is hardly unexpected, since a large portion of the facility energy consumed is used to support HVAC equipment. The weather conditions in which an HVAC system must operate will obviously influence the amount of energy consumed. Further, several of the studies noted that the three most commonly used measures of an installation's climate, HDD, CDD, and mean temperature, are not independent. An installation in a primarily cold weather climate will have a relatively high value for HDD, and relatively low values for CDD and mean temperature. For an installation in a hot weather climate, the converse would be true. Although the energy consumption models produced by different studies used differing combinations of these variables, the conclusion can be drawn that weather conditions have a significant influence on facility energy consumption.

The two Army studies which considered energy consumption in various types of facilities both concluded that there is a significant difference in energy consumption. However, the data set used for both of these was somewhat limited, consisting of a maximum of three installations. It is unclear whether the model developed could be applied to other installations.

Two studies of heavily industrialized installations, one by the Army and one by the Air Force, reached conflicting conclusions regarding the influence of level of industrial activity on energy consumption at these facilities. The Army study found that at some AMC installations, level of activity indicators could be included in an energy consumption model. The Air Force study of ALCs found that it was not a significant influence. Another study by DLA did conclude that level of activity indicators may have an influence on energy consumption, but was unable to develop a useful model. It is unclear whether energy at these installations is consumed in a similar

manner to other, more operations-oriented ones. It is clear from the 1980 CERL study that the majority of energy consumed by facilities at operational installations is used to operate HVAC systems; this same conclusion may not be true for more industrial installations.

Looking at all of the previous work summarized in this chapter, two conclusions can be drawn. First, multiple linear regression is the most appropriate method for predicting energy consumption at a military installation. Several other methods were examined, but the authors concluded that multiple linear regression had the best results. Second, climatic factors must be included in any energy consumption model. They are the only factors which were included in all of the models. It is not clear, however, which variables have the most influence.

So, while a definitive model has not yet been developed which can consistently predict energy consumption at a military installation, many of the factors which influence consumption have been identified. These factors will provide a starting point for this thesis, so that other factors may be added to try to create a model which will more accurately predict energy consumption at an Air Force Base.

III. Methodology

Introduction

This chapter will present an overview of the process used to determine factors which influence facility energy consumption at an Air Force base. The chapter will be presented in three sections. The first will provide a general overview of the steps used to analyze the data, from definition of the population to the development of the final multiple linear regression model. The second section will provide a more detailed description of the data collection process, and the third will describe the statistical tools used to analyze and characterize the data. A small subset of the set of data analyzed in chapter IV will be used in this section for illustration purposes.

Overview of Methodology

In chapter I, two research objectives were defined. The first was to identify a set of variables which could be used to predict energy consumption at an Air Force base. The second was to use those variables to construct one or more models which accomplish this prediction. In order to accomplish these two objectives, a set of data was collected for a number of members of the population. Each observation in this data set consisted of a value for the dependent variable, as well as several candidate independent variables. The choice of candidate independent variables was guided by the previous research summarized in chapter II. The candidate variables were evaluated using the techniques described later in this chapter, and those which are determined to have low predictive value were discarded. Using some additional statistical techniques, an attempt was made to group the observations based on characteristics of the bases they represent. For each group, a multiple linear regression (MLR) model was created. For one such grouping,

additional information about the bases' infrastructure was collected through the base civil engineers' Work Information Management System (WIMS). Finally, a second MLR model was developed using this additional information.

Population. The population in this case consists of all active duty Air Force installations (Reserve installations were excluded) which record energy consumption and report it to the Air Force Civil Engineering Support Agency (AFCESA), located at Tyndall AFB.

Sample. The sample consisted of all Air Force installations located within the continental United States (CONUS) and belonging to the five major commands (MAJCOMS) which oversee the operation of more than one base. A brief description of each MAJCOM follows. These descriptions are not intended to duplicate the mission statements or descriptions of the MAJCOMS; rather, the intent is to provide a brief synopsis of the types of activities at each MAJCOM's bases:

Air Combat Command (ACC): Operates bases from which fighter, attack, bomber, tanker, and intra-theater airlift aircraft are flown and maintained.

Air Mobility Command (AMC): Operates bases from which inter-theater transport and tanker aircraft are flown and maintained from both training and operational airlift missions.

Air Force Materiel Command (AFMC): Operates bases which perform functions related to research, development, design, testing, procurement, and depot level maintenance of aerospace and related systems.

Air Education and Training Command (AETC): Operates bases which conduct basic military, technical, and flying training, as well as professional military education.

Space Command (SPC): Operates bases which launch, monitor, and control space systems.

Three other commands also operate bases within the CONUS, Special Operations Command, Air Force District of Washington, and the U.S. Air Force Academy. However, these MAJCOMS were not considered because each only consists of one base.

Description of Data

The majority of the data used in this thesis was obtained from AFCESA in the form of reports which detailed each base's inputs to the DUERS system. These reports were obtained for all of the bases in the aforementioned commands for the period from October 1990 to September 1994. Although the reports contained a great deal of information regarding costs and quantities of energy acquired from various sources, three independent variables (HDD, CDD, and SQFT) were initially used in this thesis. The values of all but one of these variables were reported on a monthly basis; thus for each base there are a maximum of 48 observations. Categorical variables denoting the controlling major command and type of mission for each base were used to divide the data into subgroups, and then data describing two additional independent variables was obtained for a smaller sample of bases. The three initial independent variables and the dependent are described below:

Heating Degree Days (HDD): This independent variable represent the sum of all the daily heating degree days for each month. One heating degree day occurs for each degree of difference between the mean daily temperature and 65 degrees Fahrenheit. (Note: this variable has a minimum value of zero. If the mean daily temperature is above 65 degrees Fahrenheit, the value

of HDD will be zero and the value of Cooling Degree Days, below, will be positive). HDD is reported on a monthly basis.

Cooling Degree Days (CDD): This variable, also independent, represents the monthly sum of the differences between the mean daily temperature and 65 degrees Fahrenheit, when the mean daily temperature is above 65 degrees Fahrenheit. Thus, for a day on which the mean daily temperature is 70 degrees, the value of CDD would be 5. As is the case for HDD, this variable can only have nonnegative values and is reported on a monthly basis.

Million British Thermal Units per Square Foot (MBTU/SF): This variable is a measure of the total energy consumed per square foot of facility floor space, and is the dependent variable for this thesis. It is reported on an monthly basis. The energy may come from a number of sources; use of electricity, natural gas, coal, fuel (heating) oil, or purchased steam are common. The consumed quantity of each product is converted to MBTU using the following relationships, and the total is divided by the total number of square feet of facility floor space on the installation (Leigh, 1993):

Electricity: 3.413 MBTU per megawatt hour
Coal (Anthracite): 25.4 MBTU per ton
Coal (Bituminous): 25.58 MBTU per ton
Natural Gas: 1.03 MBTU per 1000 cubic feet
Fuel Oil Distillate: 5.825 MBTU per barrel
Saturated Steam: 1340 MBTU per pound

This thesis is only concerned with the total quantity of energy consumed per square foot of floor space; no effort will be made to differentiate between energy obtained from different sources.

Square Feet of Facility Floor Space (SF). This is also an independent variable which represents the total facility floor space at an installation. It is only updated annually, so all the value of SF will be the same for each month of a given fiscal year. It was assumed that any

increases or reductions in the amount of facility floor space occurred at the beginning of the year, and that the space was used for the entire year. There is no differentiation between the various uses of floor space; all uses are aggregated into this variable. It was assumed that all reported floor space is energized, even though this is probably not the case.

The following are the categorical variables which were used to evaluate dividing the data into subgroups:

Presence of an Active Flying Mission (FLY). This is a categorical variable which identifies bases which support an active flying wing.

Presence of a Depot (DEPOT). This is another categorical variable which identifies bases which support a depot used for the overhaul of either aircraft or space systems.

Major Command (MAJCOM). This categorical variable identifies the MAJCOM which operates each base.

Analysis of these factors was used to divide the bases into subgroups for development of MLR models. Additionally, for some bases in Air Combat Command, information was collected regarding the bases' real property. Optimally, this data would have been obtained for all of the MAJCOMS, but time constraints placed on this research precluded such a comprehensive study. Air Combat Command was chosen because it is the largest CONUS command, which increased the likelihood of gathering a sufficient number of responses, and also because it operates bases in a wide variety of climates. The two additional variables which were added are:

Mean Age of Real Property (RPAGE). The value of this variable was obtained by use of a computer report program which queried each bases' real property inventory and determined total square footage and date constructed for selected real property category codes.

All Air Force facilities are assigned a category code which identifies the primary use of the facility. Since category codes are assigned to objects other than buildings, such as roads, sidewalks, runways, utility systems, and the like, only category codes which identify buildings were selected. The number of square feet in each facility was used to weight the mean age of facilities by the following procedure: For each facility, the age was determined using the date the facility was constructed. The age was then multiplied by the square footage for each facility. The total of these products (for all facilities) was then divided by the total quantity of facility floor space for each installation to determine the weighted mean age for the installation. An example of the spreadsheet used to compute this value is shown at Appendix A. Note that it also computes the average age of the facilities so that any wide deviation between these two quantities can be noted.

Ratio of Large Maintenance and Storage Facilities (MAINT). This variable reflects the percentage of the installation's facilities which are large, open-bay maintenance facilities. As mentioned in chapter two of this thesis, previous research efforts have identified these facilities as being greater energy consumers due to their high-bay doors which release heated or cooled air to the exterior of the building (Botros, 1977). This information was also obtained by means of a computer report program. It produced a spreadsheet similar to the one used to generate values for RPAGE, but with the date constructed omitted. Also, only the category codes associated with particular types of buildings were included. The facility floor area of maintenance and storage facilities was summed, and divided by the corresponding value of SF obtained from the DUERS data.

Since the computer report programs which generate values for both RPAGE and MAINT are only capable of querying the current real property inventory, only the current age and ratio

were able to be obtained. RPAGE was adjusted for each of the previous years by simply subtracting the appropriate number of years; however, this is inaccurate because it would not account for facilities which were demolished between October 1990 and the present. No adjustments were made to MAINT. The denominator of the ratio, total facility floor area, was taken from the FY 1994 DUERS report. The author felt that changing the denominator from one fiscal year to the next would add little value to the effort, since any changes in facility floor space which would affect the denominator would also have an effect on the numerator. Without access to previous years' real property inventories, the changes in the numerator could not be determined. These two independent variables were added to the group selected for additional study in an attempt to develop an improved MLR model.

Computer Software

The primary software package used to analyze the data for this thesis was Statistix 4.1. This is a program which is run on an IBM PC or compatible computer, and provides the ability to perform all of the statistical techniques which are described in this section (Statistix, 1992). The advantage of Statistix over minicomputer- or mainframe-based programs is that it is a menu-driven, user friendly program. In addition to performing statistical analysis, Statistix was used to enter all of the data observation obtained for this thesis.

Evaluation of Candidate Independent Variables

Overview. This section will describe the various statistical tools used to evaluate each of the candidate independent variables, which have already been presented. This section is concerned with the methodology used to meet the first objective of the research, identifying factors which could be used to predict energy consumption at an Air Force Base. The evaluation began by using qualitative techniques to observe the behavior of the dependent variable relative to changes in each candidate independent variable. Also, relationships among the candidate independent variables themselves were examined. As the research progressed, the techniques used switched from qualitative to more quantitative method. Decision rules were formulated in order to eliminate certain of the candidate independent variables as statistically insignificant for modeling purposes. For each of these quantitative methods described in this section, the test statistic and the decision rule which were used will be specified. All of the analysis used in this thesis will employ a level of significance, or α, of 0.05. As mentioned at the beginning of this chapter, a subset of the sample used in chapter IV will be used to illustrate the methods described in the following sections. This subset consists of 79 monthly observations from seven AMC bases, and can be found at Appendix A-1.

Descriptive Statistics

Descriptive statistics are methods that are used for the "organization and summarization of data" (Devore, 1991). There are two general categories of descriptive statistics: pictorial and tabular, or numerical (Devore, 1991). Both methods were used to examine and present the data set in this thesis. A brief description of some of the specific techniques used is given below.

Several graphical techniques were used to examine the data points in a qualitative manner. Performing this type of analysis prior to applying numerical analysis provided two benefits. First,

the qualitative analysis techniques helped to visualize relationships between the variables, as well as their distributions. Second, and equally important, these techniques made detection of erroneous values possible. Since all of the data had to be manually keyed into the computer, this was an important benefit. The three primary tools for performing qualitative analysis were histograms, box and whisker plots, Wilk-Shapiro/Rankit plots, and scatter plots. All of these techniques will be used in the following chapter to present the data and make inferences regarding the distributions of the variables.

A histogram of the data set is shown at Figure 3-1. At first examination, the data seems to be somewhat skewed right. However, the sample used for illustration purposes in this chapter is fairly small, and some other test will be performed to determine whether the data appear to be normal and the effects of any outliers, or extreme values.

Figure 3-2 is a box and whisker plot of the data. The box and whisker plot orders the data from smallest to largest observation, and then dividing it into fourths. The horizontal line across the center of the box represents the sample mean, and each half of the box represents the fourth above and below the mean. The two vertical lines extending from the box, the whiskers, represent the upper and lower fourths. Were there any outliers in the data set, they would be represented by an asterisk for a possible outlier, or a circle for a definite outlier. This plot is useful because it pictorially represents the center, spread, symmetry, and the presence of outliers (Devore, 1991).

Figure 3-1
Example Histogram

A Wilk-Shapiro/Rankit plot is shown at Figure 3-3. This plot, and the accompanying Wilk-Shapiro statistic, are used to determine the normality of the data. If the data is normally distributed, this plot should appear to be linear. The Wilk-Shapiro statistic can assume values between zero and one, with higher values indicating that the data approximates a normal distribution. There is know threshold at which the data can be said to definitely approximate a normal distribution; some subjective judgement must be exercised.

Scatter plots help to visualize the relationship between two variables. The independent variable is plotted along the horizontal axis, and the dependent variable along the vertical axis. Scatter plots for three independent variables are given at Figures 3-4, 3-5, and 3-6. In the first the independent variable is HDD. This plot shows quite clearly that when HDD increases, MBTU also tends to increase. The second plot, CDD vs. MBTU, seems to show that as CDD increases, MBTU tends to decrease. However, the trend is not as clear as in the first scatter plot. The third plot, SQFT vs. MBTU, is not as useful as the first two since the independent variable has the same value for all monthly observations in a given year. Scatter plots were used in this thesis to find out which variables were valid candidates for regression modeling.

Tabular methods used include computation of summary statistics such as the sample mean, sample variance, and the like. These values may be used to make inferences about the population from which the sample is drawn.

For a sample consisting of n observations of a variable X, the sample mean, or x, is calculated as follows:

Figure 3-2
Example Box and Whisker Plot

Figure 3-3
Example Wilk-Shapiro/Rankit Plot

Figure 3-4
Example Scatter Plot: MBTU vs. HDD

Figure 3-5
Example Scatter Plot: MBTU vs. CDD

Figure 3-6
Example Scatter Plot: MBTU vs. SQFT

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

The sample mean is used to approximate the population mean, given by μ.

Another statistic similar to the sample mean is the sample median. For the same sample as the above example, the median is obtained by ordering the observations from smallest to largest. The median is given by either the single middle value if n is odd, or the average of the two middle values if n is even. The mean and median can be used in conjunction with each other to determine whether the sample data is skewed. For example, if the mean is less than the median, this would indicate a negative skew. Likewise, if the mean is greater, a positive skew would be indicated. For a sample drawn from a symmetric population, the two values would be expected to be approximately equal.

For the same sample of size n, the sample variance, or S^2, is calculated as:

$$S^2 = \sum_{i=1}^{n} \frac{(x_i - \bar{x})^2}{n}$$

This statistic describes the variability of the sample data. When S^2 is small, this indicates that most of the observations have values relatively close to the sample mean, while a larger value indicates that the observations have more variability or spread.

Table 3-1 shows an output of descriptive statistics from Statistix 4.1. Note that this program shows SD rather than S^2. SD is the standard deviation, which is simply the square root of the sample variance.

Table 3-1

STATISTIX 4.1 CH3DATA, 09/13/95, 11:04

DESCRIPTIVE STATISTICS

	MBTU	CDD	HDD	SQFT
N	79	79	79	79
MEAN	0.0156	90.380	464.54	3843.5
SD	7.756E-03	148.40	492.89	1060.1
MINIMUM	4.400E-03	0.0000	0.0000	2315.0
MEDIAN	0.0138	7.0000	284.00	3719.0
MAXIMUM	0.0324	537.00	2198.0	5898.0

Correlation

Correlation provides a method for measuring the strength of a linear relation between two variables. Correlation is a powerful tool. First, it is not affected by a change in units of measurement, provided the conversion from one unit to another is linear (Devore, 1991). Also, it allows comparison of the strength of the linear relation of one pair of variables to another pair (Weck, 1981). If, as is the case for this thesis, more than two variables are to be considered, correlation analysis must be performed on a pairwise basis.

The quantity used to measure the strength of each pair's linear relationship is the Pearson correlation coefficient, or ρ. The maximum value of ρ is +1.0, and this value indicates the strongest possible positive linear relationship between the two variables of concern. Likewise, its minimum value is -1.0, and this value indicates the strongest possible negative linear relationship. If there is no linear relationship between the two variables, then r will be zero. For purposes of this thesis, the relationship will be described as "strong" if $|\rho| \geq 0.8$, "moderate" if $0.5 \leq |\rho| < 0.8$, and "weak" if $|\rho| < 0.5$. If $\rho = 0$, the two variables are said to be uncorrelated. It is important to note that when the two variables are independent, ρ will always equal zero. However, the fact

that $\rho = 0$ does not imply independence. It simply means that a linear relationship between the two variables does not exist. Two uncorrelated variables could still be dependent, but through a nonlinear relationship . If $\rho = 0$, the two variables are said to be uncorrelated (Devore, 1991).

The fact that two variables are strongly or moderately correlated does not imply any causal relationship between them. The high degree of correlation means only that the high or low values tend to be associated with corresponding high or low values (Devore, 1991). Investigation and knowledge of the activity which the two variables represent must precede any implications as to a causal relationship between them.

For each pair of variables for which a value of ρ was determined, the null hypothesis was that the two variables were uncorrelated. Statistix 4.1 reported both a correlation coefficient and the significance level for that coefficient. If the significance level was less that 0.05, then the null hypothesis was rejected, and the two variables were determined to have either a strong, moderate, or weak linear relationship as appropriate. So, in summary:

$$H_0: \ \rho = 0$$

$$H_A: \ \rho \neq 0.$$

The test statistic used for the correlation analysis of the candidate independent variables is the P-value. A P-value is "the smallest level of significance at which H_0 would be rejected when a specified test procedure is used on a given data set" (Devore, 1991). Statistix 4.1 simplifies the use of P-values in correlation analysis by presenting a P-value along with the correlation coefficient in the correlation matrix.

Table 3-2 shows a correlation matrix created by Statistix 4.1. Note that the results of the correlation analysis complement the qualitative analysis performed by means of scatter plots. The

correlation coefficients computed are all statistically significant except for that between CDD and HDD, since all but that one are less than α. Note also that the dependent variable is strongly correlated with HDD and SQFT, while it is weakly correlated with CDD. Note also that CDD and HDD are moderately correlated with SQFT, although there is no reason to suspect that there is a causal relationship between them.

Table 3-2
Example Correlation Matrix

```
STATISTIX 4.1                                          CH3DATA, 09/13/95,
13:00

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

            CDD       HDD       SQFT
HDD         0.0174
  P-VALUE   0.8793

SQFT        0.4924    0.6608
            0.0000

MBTU        0.2602    0.9046    0.8665
            0.0205    0.0000

CASES INCLUDED 79   MISSING CASES 0
```

Analysis of Variance(Devore, 1991)

Analysis of Variance (ANOVA) is the name for a set of statistical procedures and analysis techniques used to examine data gathered from two or more populations. The different populations are identified by the differences in the factor under consideration. The goal of ANOVA is to determine whether the means of the various populations differ to a significant extent. Consider the case of a data set consisting of I treatments. (Note: ANOVA is easier performed if each treatment consists of the same number of observations. However, it is not necessary and that assumption will not be made in this case. The formulas used to compute these

statistics are somewhat more complex than the case where the sample sizes for the various treatments are equal). The null hypothesis in this case is that the means are all equal, and the alternate hypothesis is that at least one mean is not equal to the others, or:

$$H_0: \ \mu_1 = \mu_2 = \ldots = \mu_i$$

$$H_A: \text{ at least one } \mu_a \neq \mu_b$$

In order to examine the validity of the null and alternate, several quantities are used to examine the i sample means. These three quantities are known generally as the sums of squares, and consist of the total sum of squares (SST), the treatment sum of squares (SSTr), and the error sum of squares (SSE). For a data set of I treatments, each of which consists of J_i observations, and with the total number of observations given by

$n = \Sigma_i J_i$, their formulas are given by:

$$SST = \sum_{i=1}^{I} \left[\sum_{j=1}^{J_i} X_{ij}^2 - \frac{1}{n} \cdot X_{..}^2 \right]$$

$$SSTr = \left[\sum_{i=1}^{I} \frac{1}{J_i} \cdot X_{i.}^2 - \frac{1}{n} \cdot X_{..}^2 \right]$$

$$SSE = SST - SSTr$$

These are used to calculate the Mean Square for Treatments (MSTr) and the Mean Square for Error (MSE). These statistics measure respectively the variation among the i sample means, and the variation over all I samples regardless of treatment. When the null hypothesis is true, the values of MSTr and MSE should be similar, so the ratio of MSTr to MSE should be close to one. However, when the alternate hypothesis is true, MSTr should greatly exceed MSE, resulting in a ratio much greater than one. Thus, the test statistic for ANOVA is given by:

$$f = \frac{MSTr}{MSE}$$

The value of this statistic is compared with the F distribution, and the null hypothesis is rejected if

$$f \geq F_{\alpha,I-1,n-1}$$

where α is the desired level of significance for the test.

ANOVA was used extensively in this thesis to evaluate the various categorical variables which were considered. Each categorical variable was used as a factor, and ANOVA was performed on the entire data set to determine how to group the observations for MLR modeling.

This technique requires that the user make two assumptions: First, that all of the treatment distributions are normally distributed, and second, that their variances are equal, or $\sigma_1^2 = \sigma_2^2 = ... = \sigma_i^2$. Supplemental tests were performed on the data in order to verify the validity of the first assumption, but research found that performing tests to ensure the validity of the second were not recommended (Devore, 1991).

Comparisons between multiple treatments in this thesis used Tukey's procedure. This procedure uses a probability distribution called the Studentized Range distribution to obtain confidence intervals for comparison of means between two populations I and J. It is given by:

$$X_{i.} - X_{j.} - Q_{\alpha,I,I(J-1)}\sqrt{MSE / J} \leq \mu_i - \mu_j \leq X_{i.} - X_{j.} + Q_{\alpha,I,I(J-1)}\sqrt{MSE / J}$$

This procedure is used to group the data into groups whose confidence intervals do not "overlap". These will be considered to be significantly different at the level of significance α which has been specified (Devore, 1991). Table 3-3 shows the Statistix 4.1 output for a one way ANOVA

analysis, with the seven bases used as the treatments, and Table 3-4 shows the output from a Tukey procedure.

The ANOVA output clearly shows that the null hypothesis, that all μ's are equal, should be rejected. As with the correlation matrix, Statistix 4.1 calculates a P-value for this procedure, which can be used to interpret the statistical significance. In this case, P is less than 0.05, so the results are statistically significant for the α specified in this thesis.

The Tukey procedure determined that there were three groups whose means were significantly different at $\alpha = 0.05$. Bases 5 and 6 are in the first group, base 1 is in the second, and bases 3 and 4 are in the third. The group to which bases 2 and 7 belonged could not be determined, as they overlapped more than one group.

Development of Model

Overview. In order to satisfy the second research objective stated in chapter I, which was to construct a model to predict energy consumption at an Air Force base, this thesis will concentrate on the use of multiple linear regression (MLR). Other research efforts have found this to be the most appropriate method for forecasting energy consumption (Weck, 1981; Tinsley, 1981; and Morill, 1985).

This section will present a brief description of the MLR technique, a definition of the test statistic used to determine the predictive ability of the model, and will list the assumptions which were made in using this technique.

Description of Technique

A regression model is a means of expressing a statistical relationship in which the following two conditions are present (Neter et al, 1983):

1. A tendency of the dependent variable Y to vary with the independent variable or variables in a systematic fashion.
2. A scattering of observations around the curve of statistical relationship.

Multiple linear regression, then, is "a statistical method relating the value of a dependent variable to the influence of two or more independent variables, all acting at some time" (Tinsley, 1981).

A simple linear regression model is expressed as an equation which describes a straight line which may or may not pass through the origin. As variables are added, the equation describes a plane, and then a hyperplane. In the case where n independent variables are used, the equation would describe a hyperplane in n + 1 dimensions, and would be given as:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \ldots + \beta_n X_{ni} + \varepsilon_i$$

Where:

Y_i is the response (dependent) variable for the ith trial

$\beta_0, \beta_1, \beta_2, \ldots \beta_n$ are parameters

$X_{1i}, X_{2i}, \ldots, X_{ni}$ are the values of the independent variables for the ith trial

ε_i is a random error term with expected value of zero (Neter et al, 1983).

(The fact that an equation with a large number of independent variables describes an object which is difficult to visualize is not important).

Table 3-3
Example Analysis of Variance

```
STATISTIX 4.1                                                CH3DATA, 09/13/95,
13:40

ONE-WAY AOV FOR MBTU BY BASE

SOURCE    DF       SS         MS        F       P
-------  ----  ---------  ---------  ------  ------
BETWEEN    6     0.00179  2.990E-04    7.43  0.0000
WITHIN    72     0.00290  4.025E-05
TOTAL     78     0.00469

                     CHI-SQ    DF       P
BARTLETT'S TEST OF   ------  ------  ------
   EQUAL VARIANCES    28.48     6    0.0001
COCHRAN'S Q                     0.2756
LARGEST VAR / SMALLEST VAR      50.922

COMPONENT OF VARIANCE FOR BETWEEN GROUPS  2.297E-05
EFFECTIVE CELL SIZE                          11.3
                          SAMPLE     GROUP
   BASE          MEAN      SIZE     STD DEV
---------   ----------  ------  ----------
    1          0.0173     12    8.832E-03
    2          0.0100     12    5.116E-03
    3          0.0166     10    6.728E-03
    4          0.0146     12    6.884E-03
    5          0.0215     12    6.565E-03
    6          0.0220      9    6.449E-03
    7       8.692E-03     12    1.238E-03
TOTAL          0.0156     79    6.344E-03
```

Table 3-4
Tukey Comparison of Means

```
STATISTIX 4.1                                              CH3DATA, 09/13/95,
13:40

TUKEY (HSD) PAIRWISE COMPARISONS OF MEANS OF MBTU BY BASE

                        HOMOGENEOUS
   BASE         MEAN    GROUPS
---------  ----------  -----------
     6         0.0220    I
     5         0.0215    I
     1         0.0173    I I
     3         0.0166    I I I
     4         0.0146    I I I
     2         0.0100   .. I I
     7     8.692E-03    .... I

THERE ARE 3 GROUPS IN WHICH THE MEANS ARE
NOT SIGNIFICANTLY DIFFERENT FROM ONE ANOTHER.

CRITICAL Q VALUE 4.289   REJECTION LEVEL 0.050
STANDARD ERRORS AND CRITICAL VALUES OF DIFFERENCES
VARY BETWEEN COMPARISONS BECAUSE OF UNEQUAL SAMPLE SIZES.
```

The goal of the analysis described in the previous section was to determine which of the candidate independent variables would be included in the model. Once that was done, the goal of the subsequent model development was to determine the values of the model parameters, and to assess the model's predictive ability.

Many of the statistics which were described in the ANOVA section will also be used to determine values for the parameters. SST and SSE are calculated for the model by the same techniques used in ANOVA. An additional statistic is used to account for the difference between these two sums of squares, the regression sum of squares, or SSR. this quantity is given by the formula:

$$SSR = \Sigma (Y_i - Y)^2$$

where each Y_i is a value of the dependent variable predicted by the model, and Y is the mean of these predictions. SSR measures the variation of the predictions from the mean, while SSE measures the variation of the predictions from the regression line (for the case of one independent variable) or the regression plane (for more than one independent variable). When constructing a model, the goal is to define the regression line (or plane) such that all of the points fall as close to it as possible. If the fit were perfect, SSE would equal zero. The primary tool for measuring a model's effectiveness is the coefficient of determination, r^2. It is given by the formula:

$$r^2 = 1 - SSE/SSTO,$$

with $0 \leq r^2 \leq 1$. Large values of r^2 indicate a good fit, while small ones indicate a poor one. This statistic was used extensively in this thesis to quickly evaluate the various models which were constructed.

Test Statistic

The test statistic used to accept or reject regression models for this thesis was the F statistic. The value of F for a given model is calculated using some of the statistics described above. Also, the number of observations upon which the model is based, n, is used. First, the regression mean square, MSR, and the mean square for error, MSE are calculated:

$$MSR = \frac{S}{} \quad MSR = \frac{SSR}{1} = SSR$$

$$MSE = \frac{S}{n} \quad MSE = \frac{SSE}{n-2}$$

The value of the test statistic was then calculated for each model by:

$$f = MSR/MSE$$

and the value compared with the value of the F statistic, and the model is accepted if:

$$f \geq F_{\alpha,I-1,n-1}.$$

Assumptions

This section describes assumptions which were made specific to the application of the linear regression model to the data set. Each assumption is listed along with methods used to verify its validity.

The first assumption that will be made is that the activity to which the regression model is being fit is linear. The linear regression model will not be appropriate if the independent variable(s) and the dependent variable are not linearly related. As stated earlier, previous research has indicated that this model is indeed appropriate for modeling energy consumption. The validity of this assumption will be verified qualitatively by means of scatter plots, and quantitatively by means of the correlation coefficients.

Another assumption is that the error terms in the regression model, ε_i, have constant variance. When this condition is true, it is said that the observations are homoscedastic, while in the case of unequal variances they are said to be heteroscedastic. Residual plots will be used to verify that the data is homoscedastic, or nearly so.

A related assumption is that the error terms are normally distributed. Small departures from normality will not greatly affect the application of the linear regression model. However, large departures will render the model useless. The primary means for verifying the normality will be by means of Wilk-Shapiro plots of the residuals. This test will be used subjectively in conjunction with the other information to determine aptness of the model (Neter et al, 1983).

Example

An example of the type of regression analysis performed in chapter IV is given below for the data subset used previously in this chapter. Table 3-5 shows the output from a Statistix 4.1 regression model. In this case, HDD, CDD, and SQFT were chosen as the independent variables based on the results of the correlation analysis performed earlier in this chapter.

The column labeled "COEFFICIENT" represents the values for $\beta 0$, $\beta 1$, ... βn. As with the other Statistix 4.1 products, this table provides a P-value for each of these coefficients. The R-squared value of 0.8045 is closer to one than to zero, which indicates that the regression model is probably appropriate in this case.

Statistix 4.1 provides a valuable tool for checking the validity of the assumption that the error functions are normally distributed. This is a Wilk-Shapiro/Rankit plot of standardized residuals, shown at Figure 3-7. This plot, and the accompany statistic, are interpreted in the same way as earlier in this chapter. Note that the high value (0.9564) for the Wilk-Shapiro statistic indicates that the assumption that the error functions are normally distributed was probably valid.

Table 3-5
Example Regression Analysis

```
STATISTIX 4.1                                          CH3DATA, 09/13/95,
14:09

UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU

PREDICTOR
VARIABLES    COEFFICIENT    STD ERROR     STUDENT'S T       P       VIF
---------    -----------    ---------     -----------    ------    -----
CONSTANT        0.00892       0.00167         5.35       0.0000
HDD           1.340E-05     9.658E-07        13.88       0.0000      1.4
CDD          -4.033E-06     3.212E-06        -1.26       0.2132      1.4
SQFT          2.021E-07     3.745E-07         0.54       0.5910      1.0

R-SQUARED           0.8045      RESIDUAL MEAN SQUARE (MSE)  1.223E-05
ADJUSTED R-SQUARED  0.7967      STANDARD ERROR OF ESTIMATE    0.00350

SOURCE        DF       SS           MS          F        P
----------   ---   ----------   ----------   -----   ------
REGRESSION     3     0.00377      0.00126   102.87   0.0000
RESIDUAL      75   9.173E-04    1.223E-05
TOTAL         78     0.00469

CASES INCLUDED 79   MISSING CASES 0
```

Figure 3-7
Example Plot of Standardized Residuals versus Fitted Values

Figure 3-8
Example Wilk-Shapiro/Rankit Plot of Standardized Residuals

IV. Results

Introduction

This chapter will present the results of the statistical procedures described in the previous chapter on the data collected for this thesis. First, the results obtained for the entire data set will be presented and discussed. Next, ANOVA will be used to examine prospective ways of dividing the data set into smaller groups for regression modeling. The same statistical procedures will be performed on these groups, and the results compared with those obtained earlier for the entire data set. Finally, the additional data obtained for selected ACC bases will be added to see if an improved model results.

Analysis of Entire Data Set

The first step in the analysis of data for this thesis was to evaluate the set of data for all CONUS bases, select prospective independent variables, assess the data's aptness for the linear regression model, and construct a linear regression model for energy consumption. The data set initially consisted of 3,936 observations for each variable. Some observations were obviously erroneous. Some, for example had values of zero for both CDD and HDD. This would indicate that the mean daily temperature was 65 degrees Fahrenheit every day of that month. Other observations had a value of zero for MBTU, which would indicate that no energy was consumed by the installation during that month. If either of these two conditions were met, the observation was discarded. Also discarded were observations from the following MAJCOMs because each only controls one base: U.S. Air Force Academy, Air Force District of Washington, and Special Operations Command.

The histogram of MBTU, Figure 4-1, shows a marked skew right, with many apparent outliers. Figure 4-2, the box and whiskers plot, confirms this impression. A Wilk-Shapiro/Rankit plot (Figure 4-3) was then performed to evaluate the normality of the MBTU data. The value of the Wilk-Shapiro statistic, 0.5629, indicates that the data are not normally distributed.

Scatter plots were constructed (Figures 4-4 and 4-5) of MBTU versus HDD and CDD. Both of these seem to display some degree of linear tendency, although the graph of CDD versus MBTU appears to have more of a constant slope. both graphs appear to have a large number of outliers above the apparent regression line. Also, there are a number of points which have a high positive value for MBTU while the independent variable is equal to zero. These values occur during the seasons of most severe temperatures, summer and winter. Energy consumption during these seasons tends to be the highest due to heating and cooling loads. However, during the season (winter) when HDD is expected to have its highest values, CDD can be expected to have its lowest, and vice versa. These values would make the fitting of a regression model more difficult, since the value of the dependent variable would vary widely at a constant value of the independent variable. In order to try to mitigate this effect, a new variable, CHDD, was created where, for each monthly observation:

$$CHDD = CDD + HDD.$$

This new variable was intended to eliminate the cases where CDD or HDD is zero during the extreme temperature seasons by constructing a variable which would treat high or low temperatures generically as they deviated from the 65 degree daily mean. The scatter plot of CHDD versus MBTU is shown at Figure 4-6. Although there still appear to be a great number

Figure 4-1
Histogram of MBTU (Entire Data Set)

Figure 4-2
Box and Whiskers Plot of MBTU (Entire Data Set)

Figure 4-3
Wilk-Shapiro/Rankit Plot of MBTU (Entire Data Set)

Figure 4-4
Scatter Plot of MBTU vs HDD (Entire Data Set)

Figure 4-5
Scatter Plot of MBTU vs. CDD (Entire Data Set)

Figure 4-6
Scatter Plot of MBTU vs. CHDD (Entire Data Set)

Figure 4-7
Scatter Plot of MBTU vs. SQFT (Entire Data Set)

of outliers above the apparent regression line, this graph shows the most prominent appearance of linear behavior of the three temperature-related variables.

A scatter plot was also constructed of SQFT versus MBTU (Figure 4-7). This plot does not show an easily visible linear relationship since the value of SQFT remains constant for each base over each of the four fiscal years. Thus, for each discrete value of SQFT there will be twelve different values of MBTU. The graph does not show any obvious evidence of linear behavior.

The next step in assessing the potential for each of these variables is to perform a correlation analysis. Although as mentioned above, some of the variables showed more promise than others, all were included in this analysis. (The variables AGE and MAINT were not included because this data was obtained for only a small number of bases. They are discussed in the section entitled "ACC bases with Supplemental Data"). The results are given in Table 4-1. The table shows that all of the independent values were positively correlated with MBTU; the strongest correlation was with CHDD, followed by HDD, SQFT, and CDD. All of these were moderately correlated with MBTU, with the exception of CDD which was weakly correlated. The P-values shown for these correlation coefficients (all were less than 0.0001) show that these results are statistically significant at $\alpha = 0.05$.

The next step will be to attempt to incorporate the moderately correlated variables in a linear regression model. The following variables will be included: CHDD and SQFT. HDD is also moderately correlated with MBTU; however, it has a high degree of correlation with CHDD, and therefore should not be included. CDD will be omitted because it is only weakly correlated with MBTU. The results of the regression analysis using these variables is shown in Table 4-2.

Table 4-1
Correlation Matrix (Entire Data Set)

```
STATISTIX 4.1                                                    , 09/18/95, 9:01

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

            HDD       CDD       CHDD      SQFT
CDD         0.0223
  P-VALUE   0.1955

CHDD        0.8998    0.4563
            0.0000    0.0000

SQFT        0.5094    0.4763    0.6612
            0.0000    0.0000    0.0000

MBTU        0.6780    0.3496    0.7561    0.5765
            0.0000    0.0000    0.0000    0.0000

CASES INCLUDED 3365   MISSING CASES 0
```

The P-values returned by Statistix 4.1 show that these coefficients are statistically significant at $\alpha = 0.05$.

The R^2 value obtained by using CHDD and SQFT as the independent variables in a regression model was 0.1265, which does not indicate a good fit. Although the P-values indicate that the results of this analysis are statistically significant, this model could not be used to predict energy consumption. One interesting note is that the coefficient for SQFT is negative, which would indicate that larger installations generally use less energy per square foot than smaller ones.

In order to determine whether the linear regression model was appropriate, several tests were run on this regression model in order to check for aptness. Recalling the assumptions necessary for the use of the regression model (listed in chapter III), the first test that was

Table 4-2
Regression Analysis Table (Entire Data Set)

```
STATISTIX 4.1                                                , 09/18/95, 13:40

UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU

PREDICTOR
VARIABLES    COEFFICIENT    STD ERROR     STUDENT'S T       P       VIF
---------    -----------    ---------     -----------    ------    -----
CONSTANT        0.00956     4.919E-04        19.44       0.0000
CHDD          1.530E-05     7.197E-07        21.26       0.0000      1.0
SQFT         -2.896E-07     6.689E-08        -4.33       0.0000      1.0

R-SQUARED           0.1265      RESIDUAL MEAN SQUARE (MSE)  1.535E-04
ADJUSTED R-SQUARED  0.1260      STANDARD ERROR OF ESTIMATE    0.01239

SOURCE         DF       SS           MS          F        P
----------    ---   ----------   ----------   -----   ------
REGRESSION      2     0.07319      0.03659   238.41   0.0000
RESIDUAL     3292     0.50529    1.535E-04
TOTAL        3294     0.57848

CASES INCLUDED 3295   MISSING CASES 0
```

performed was the plot of standardized residuals versus fitted values. If regression analysis is appropriate, all of the values should fall in a symmetrical band above and below zero. In this case (Figure 4-8), the graphical presentation seems to show that the error terms, ε_i, were equal.

Another test, the Wilk-Shapiro/Rankit plot, was performed to determine whether the error terms ε_i were normally distributed. The results of this test are given in Figure 4-9. The Wilk-Shapiro statistic value of 0.4856 indicates strongly that the error terms are not normally distributed.

So, constructing a model using the results of the entire data set is not practical because the data do not meet the assumptions necessary to apply the linear regression model. The next step performed in this thesis was to use ANOVA analysis to evaluate prospective means of dividing the data into subgroups. The first categorical variable to be evaluated was CMD, which represents the MAJCOM controlling each base. The results of this ANOVA are shown in Table 4-3. Table 4-4 shows the results of a Tukey test to determine

whether any of the Major Commands exhibit similar means for energy consumption. The results show that two commands, AFMC and SPC, had means significantly higher than the others. AMC and AETC were lower, but their means were significantly different from each other. ACC's mean was not significantly different from either AMC or AETC. However, this test shows that grouping the data by Major Command would be a statistically valid technique Flying versus non-flying bases were also evaluated using the ANOVA technique. The results of this analysis are shown in Tables 4-5 and 4-6. These tables show that the means of flying bases are significantly different from those of nonflying bases.

Another categorical variable which was evaluated for possible use in grouping the bases was DEPOT, which reflected whether a base supported a depot used for overhaul of aircraft or missile systems. The results of this analysis are given in Table 4-7. Since the P-value is greater than 0.05, there was no significant difference between the means of the two groups, so this variable was discarded as a possible grouping variable.

Table 4-8 shows the ANOVA results for the final categorical variable, FY. There is no significant difference between the mean values of MBTU for each fiscal year. In fact, the mean actually increased each year from FY 91 to FY 94.

Figure 4-8
Plot of Standardized Residuals vs Fitted Values (Entire Data Set)

Figure 4-9
Wilk-Shapiro Plot of Standardized Residuals (Entire Data Set)

Table 4-3
ANOVA (MBTU by Major Command)

```
STATISTIX 4.1                                                    , 09/18/95, 13:42

ONE-WAY AOV FOR MBTU BY CMD

SOURCE    DF       SS         MS        F       P
-------  ----  ---------  ---------  ------  ------
BETWEEN    4     0.04298    0.01074   66.01  0.0000
WITHIN  3290     0.53550  1.628E-04
TOTAL   3294     0.57848

                     CHI-SQ    DF       P
BARTLETT'S TEST OF   ------  ------  ------
   EQUAL VARIANCES 1813.92     4    0.0000

COCHRAN'S Q                     0.5220
LARGEST VAR / SMALLEST VAR     12.141

COMPONENT OF VARIANCE FOR BETWEEN GROUPS  1.652E-05
EFFECTIVE CELL SIZE                           640.7

                          SAMPLE     GROUP
   CMD          MEAN       SIZE     STD DEV
---------   ----------  ------  ----------
ACC            0.0129     957    6.522E-03
AETC           0.0122     799    7.452E-03
AFMC           0.0215     617       0.0227
AMC            0.0144     624    8.027E-03
SPC            0.0197     298       0.0176
TOTAL          0.0152    3295       0.0128

CASES INCLUDED 3295    MISSING CASES 0
```

Table 4-4
Tukey Comparison of Means (MBTU by Major Command)

```
STATISTIX 4.1                                                    , 09/18/95, 13:42
TUKEY (HSD) PAIRWISE COMPARISONS OF MEANS OF MBTU BY CMD
                       HOMOGENEOUS
   CMD          MEAN    GROUPS
---------  ----------  -----------
AFMC           0.0215    I
SPC            0.0197    I
AMC            0.0144   .. I
ACC            0.0129   .. I I
AETC           0.0122   .... I

THERE ARE 3 GROUPS IN WHICH THE MEANS ARE
NOT SIGNIFICANTLY DIFFERENT FROM ONE ANOTHER.
CRITICAL Q VALUE 3.857   REJECTION LEVEL 0.050
STANDARD ERRORS AND CRITICAL VALUES OF DIFFERENCES
```

```
VARY BETWEEN COMPARISONS BECAUSE OF UNEQUAL SAMPLE SIZES
```

Table 4-5
ANOVA Table (MBTU by Flying/Nonflying Mission)

```
STATISTIX 4.1                                                    , 09/18/95, 14:05

ONE-WAY AOV FOR MBTU BY FLY

SOURCE    DF       SS         MS        F       P
-------  ----  ---------  ---------  ------  ------
BETWEEN    1     0.02645    0.02645  157.78  0.0000
WITHIN  3293     0.55203  1.676E-04
TOTAL   3294     0.57848

                     CHI-SQ    DF       P
BARTLETT'S TEST OF   ------  ------  ------
   EQUAL VARIANCES 1635.35     1    0.0000

COCHRAN'S Q                     0.8859
LARGEST VAR / SMALLEST VAR      7.7617

COMPONENT OF VARIANCE FOR BETWEEN GROUPS  1.760E-05
EFFECTIVE CELL SIZE                          1493.6

                          SAMPLE     GROUP
   FLY          MEAN       SIZE     STD DEV
---------   ----------  ------  ----------
N              0.0191   1144       0.0197
Y              0.0132   2151    7.077E-03
TOTAL          0.0152   3295       0.0129

CASES INCLUDED 3295    MISSING CASES 0
```

Table 4-6
Tukey Comparison of Means (MBTU by Flying/Nonflying Mission)

```
STATISTIX 4.1                                                    , 09/18/95, 14:04

TUKEY (HSD) PAIRWISE COMPARISONS OF MEANS OF MBTU BY FLY

                         HOMOGENEOUS
   FLY         MEAN      GROUPS
---------  ----------  -----------
N             0.0191    I
Y             0.0132    .. I

ALL 2 MEANS ARE SIGNIFICANTLY DIFFERENT FROM ONE ANOTHER.

CRITICAL Q VALUE 2.772   REJECTION LEVEL 0.050
STANDARD ERRORS AND CRITICAL VALUES OF DIFFERENCES
VARY BETWEEN COMPARISONS BECAUSE OF UNEQUAL SAMPLE SIZES.
```

Table 4-7
ANOVA Table (MBTU by Presence of Depot)

```
STATISTIX 4.1                                                    , 09/18/95, 14:14

ONE-WAY AOV FOR MBTU BY DEPOT

SOURCE    DF       SS         MS         F       P
-------  ----  ---------  ---------  ------  ------
BETWEEN    1   5.055E-05  5.055E-05    0.29  0.5917
WITHIN  3293     0.57843  1.757E-04
TOTAL   3294     0.57848

                     CHI-SQ    DF       P
BARTLETT'S TEST OF   ------  ------  ------
   EQUAL VARIANCES    17.83     1    0.0000

COCHRAN'S Q                      0.5979
LARGEST VAR / SMALLEST VAR       1.4872

COMPONENT OF VARIANCE FOR BETWEEN GROUPS -3.086E-07
EFFECTIVE CELL SIZE                            405.4

                         SAMPLE     GROUP
  DEPOT          MEAN     SIZE     STD DEV
---------   ----------  ------  ----------
N              0.0153   3078       0.0130
Y              0.0148    217       0.0159
TOTAL          0.0152   3295       0.0133

CASES INCLUDED 3295    MISSING CASES 0
```

Table 4-8
ANOVA Table (MBTU by Fiscal Year)

```
STATISTIX 4.1                                                    , 09/28/95,
9:32

ONE-WAY AOV FOR MBTU BY FY

SOURCE    DF       SS         MS        F       P
-------  ----  ---------  ---------  ------  ------
BETWEEN    3   8.791E-04  2.930E-04    1.67  0.1695
WITHIN  3291     0.57760  1.755E-04
TOTAL   3294     0.57848

                     CHI-SQ    DF       P
BARTLETT'S TEST OF   ------  ------  ------
   EQUAL VARIANCES   312.49     3    0.0000

COCHRAN'S Q                     0.4372
LARGEST VAR / SMALLEST VAR      3.3491

COMPONENT OF VARIANCE FOR BETWEEN GROUPS  1.428E-07
EFFECTIVE CELL SIZE                          823.3

                         SAMPLE     GROUP
    FY          MEAN      SIZE     STD DEV
---------   ----------  ------  ----------
   91          0.0146    817    9.626E-03
   92          0.0149    873       0.0119
   93          0.0155    820       0.0129
   94          0.0159    785       0.0176
TOTAL          0.0152   3295       0.0132

CASES INCLUDED 3295    MISSING CASES 0
```

Analysis of Bases by Major Command

The following results were obtained by dividing the sample into the three groups mentioned above. Since ACC could be grouped with either AMC or AETC, both of these groupings will be tried; each of these three commands will also be examined alone.

SPC and AFMC. The graphical analysis of the data for these commands is contained in Appendix D. Both the histogram and the box and whiskers graph show the presence of a large number of outliers. The Wilk-Shapiro statistic's value of 0.5668 suggests that the data is not normally distributed. The three scatter plots of MBTU versus CDD, HDD, and CHDD all show

evidence of a linear trend among most of the observations; however, there seem to me a fairly significant number of points for which a relatively high value of MBTU was observed at a relatively low value of the independent variable. The scatter plot of MBTU versus SQFT shows no clearly discernible linear trend.

Table 4-9 shows the results of the correlation analysis of the data for the AFMC and SPC bases. HDD and CHDD are moderately correlated with MBTU; CDD and SQFT are weakly correlated. All of these correlation coefficients are statistically significant at $\alpha = 0.05$. CHDD and SQFT were then used to construct a linear regression model; the results are given in Table 4-10. This model has an even lower R^2, 0.0959, than the one constructed for all CONUS bases, and would probably not be useful for predicting energy consumption. Figure D-9 is the plot

Table 4-9
Correlation Matrix (AFMC and SPC Bases)

```
      STATISTIX 4.1                                                    , 09/20/95,
9:40

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

            HDD       CDD       CHDD      SQFT
CDD         0.0229
  P-VALUE   0.4889

CHDD        0.9035    0.4491
            0.0000    0.0000

SQFT        0.4893    0.4985    0.6510
            0.0000    0.0000    0.0000

MBTU        0.5881    0.3482    0.6749    0.4544
            0.0000    0.0000    0.0000    0.0000

CASES INCLUDED 915   MISSING CASES 0
```

Table 4-10
Regression Analysis Table (AFMC and SPC Bases)

STATISTIX 4.1 , 09/20/95, 9:49

UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU

PREDICTOR VARIABLES	COEFFICIENT	STD ERROR	STUDENT'S T	P	VIF
CONSTANT	0.01987	0.00152	13.04	0.0000	
CHDD	1.603E-05	2.390E-06	6.71	0.0000	1.0
SQFT	-9.335E-07	1.345E-07	-6.94	0.0000	1.0

R-SQUARED	0.0959	RESIDUAL MEAN SQUARE (MSE)	4.075E-04
ADJUSTED R-SQUARED	0.0939	STANDARD ERROR OF ESTIMATE	0.02019

SOURCE	DF	SS	MS	F	P
REGRESSION	2	0.03942	0.01971	48.37	0.0000
RESIDUAL	912	0.37161	4.075E-04		
TOTAL	914	0.41102			

CASES INCLUDED 915 MISSING CASES 0

of standardized residuals versus fitted values for this regression model, and Figure D-9 is the Wilk-Shapiro/Rankit plot. These plots show that this data may not have met the basic assumptions of the linear regression model. The plot of standardized residuals (Figure D-8) versus fitted values shows that the data appear to be heteroscedastic, and the Wilk-Shapiro/Rankit plot and statistic (Figure D-9) suggest that the error terms are strongly nonnormal. As stated in the previous chapter, any large departure from the normal distribution makes the use of the linear regression model inappropriate.

The poor results obtained in this linear regression model may be related to the extremely diverse physical plants found in AFMC and SPC. Tables 4-11 and 4-12 show the results of an ANOVA analysis and a Tukey analysis which was performed on the data for all of the CONUS bases. The dependent variable in each case was SQFT, and the analysis shows that AFMC has the highest mean of the MAJCOMs, and SPC had the lowest.

Table 4-11
ANOVA Table (Facility Floor Area by Major Command)

```
STATISTIX 4.1                                                    , 09/25/95,
13:55
ONE-WAY AOV FOR SQFT BY CMD

SOURCE    DF       SS         MS        F       P
-------  ----  ---------  ---------  ------  ------
BETWEEN    4   1.108E+10  2.771E+09  391.97  0.0000
WITHIN  3290   2.326E+10  7.069E+06
TOTAL   3294   3.434E+10

                     CHI-SQ    DF       P
BARTLETT'S TEST OF   ------  ------  ------
   EQUAL VARIANCES 2366.52     4    0.0000

COCHRAN'S Q                     0.7105
LARGEST VAR / SMALLEST VAR     23.134

COMPONENT OF VARIANCE FOR BETWEEN GROUPS  4.314E+06
EFFECTIVE CELL SIZE                          640.7
                          SAMPLE     GROUP
   CMD          MEAN       SIZE     STD DEV
---------   ----------  ------  ----------
ACC            3370.0     957       1064.2
AETC           3455.2     799       2300.1
AFMC           8098.9     617       5118.8
AMC            3887.6     624       1299.8
SPC            2793.0     298       1600.7
TOTAL          4322.0    3295       2658.8

CASES INCLUDED 3295    MISSING CASES 0
```

Table 4-12
Tukey Comparison of Means (Facility Floor Area by Major Command)

```
STATISTIX 4.1                                                    , 09/25/95,
13:55
TUKEY (HSD) PAIRWISE COMPARISONS OF MEANS OF SQFT BY CMD

                         HOMOGENEOUS
   CMD          MEAN     GROUPS
---------  ----------  -----------
AFMC           8098.9    I
AMC            3887.6   .. I
AETC           3455.2   .... I
ACC            3370.0   .... I
SPC            2793.0   ...... I

THERE ARE 4 GROUPS IN WHICH THE MEANS ARE
NOT SIGNIFICANTLY DIFFERENT FROM ONE ANOTHER.
CRITICAL Q VALUE 3.857   REJECTION LEVEL 0.050
STANDARD ERRORS AND CRITICAL VALUES OF DIFFERENCES
VARY BETWEEN COMPARISONS BECAUSE OF UNEQUAL SAMPLE SIZES.
```

AMC and ACC. Both the histogram and the box and whiskers plot (Figures E-1 and E-2) show that there are fewer outliers when the bases in these two MAJCOMs are grouped. The histogram shows a slight right skew, but the Wilk-Shapiro/Rankit plot (Figure E-3) show the data to be close to normally distributed.

The scatter plots of MBTU versus HDD, CDD, and CHDD (Figures E-4, E-5, and E-6) seem to indicate linear behavior much more clearly than the previous groupings, while the plot of MBTU versus SQFT (E-7) is again difficult to interpret visually.

Table 4-13 shows the results of the correlation analysis performed on this data. HDD, CHDD, and SQFT are all strongly correlated with MBTU, and that CDD is moderately correlated. The P-values supplied by Statistix 4.1 show that the results of the correlation analysis are statistically significant at $\alpha = 0.05$. Based on the results of the correlation analysis, as well as the appearance of the scatter plots, a linear regression model for this group of

Table 4-13
Correlation Matrix (AMC and ACC Bases)

```
STATISTIX 4.1                                                , 09/20/95, 10:09

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

            HDD       CDD       CHDD      SQFT
CDD         0.0219
  P-VALUE   0.3849

CHDD        0.9322    0.3822
            0.0000    0.0000

SQFT        0.6261    0.5297    0.7704
            0.0000    0.0000    0.0000

MBTU        0.8783    0.3366    0.9337    0.8288
            0.0000    0.0000    0.0000    0.0000

CASES INCLUDED 1581   MISSING CASES 0
```

bases was constructed with the following independent variables: HDD, CHDD, and SQFT. The results of this analysis are shown in Table 4-14. Using the R^2 and F-statistic values as an indicators of goodness of fit shows that using the linear regression model to predict energy consumption for this group of bases is much more feasible than to do so for the group of AFMC and SPC bases. This may be due to the fact that the bases are more similar in size (see Tables 4-11 and 4-12). The P-values show that the coefficients have been determined to be statistically significant at $\alpha = 0.05$. Figure E-8, the plot of standardized residuals versus fitted values, shows that the error terms appear to be homoscedastic, and Figure E-9, the Wilk-Shapiro/Rankit plot of standardized residuals, shows that a normal distribution is plausible.

Table 4-14
Regression Analysis Table (AMC and ACC Bases)

STATISTIX 4.1 CAHUNA, 11/07/95, 15:58

UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU

PREDICTOR VARIABLES	COEFFICIENT	STD ERROR	STUDENT'S T	P	VIF
CONSTANT	0.00662	3.870E-04	17.10	0.0000	
SQFT	-2.950E-07	9.347E-08	-3.16	0.0016	1.0
CHDD	1.641E-05	3.225E-07	50.88	0.0000	1.0

R-SQUARED	0.6226	RESIDUAL MEAN SQUARE (MSE)	1.953E-05
ADJUSTED R-SQUARED	0.6221	STANDARD ERROR OF ESTIMATE	0.00442

SOURCE	DF	SS	MS	F	P
REGRESSION	2	0.05086	0.02543	1301.73	0.0000
RESIDUAL	1578	0.03082	1.953E-05		
TOTAL	1580	0.08168			

CASES INCLUDED 1581 MISSING CASES 0

These tests show that the assumptions of the linear regression model appear to have been met in the case of the group of ACC and AMC.

ACC and AETC. The graphs for this data are contained in Appendix F. The histogram and box and whiskers plot (Figures F-1 and F-2) show the familiar skew right found in previous analyses. The scatter plots of MBTU versus HDD, CDD, and CHDD (Figures F-3, F-4, and F-5) seem to show a linear tendency. However, there are a small number of points located above the main group in all three of these plots. No linear pattern is discernible in the plot of MBTU versus SQFT.

Table 4-15 shows that CHDD is strongly correlated with MBTU; SQFT and HDD are moderately correlated, and CDD is weakly correlated, all of which were significant at $\alpha = 0.05$.

The strongly and moderately correlated variables were included in a linear regression model; the results are shown at Table 4-16. Again, SQFT has a negative coefficient, while the constant and the coefficients for CHDD and HDD were negative. All of these values were significant at $\alpha = 0.05$. The R^2 value for this model is 0.4620, which indicates that the model fit the data rather poorly.

Figures F-8 and F-9, the plot of standardized residuals versus fitted values and the Wilk-Shapiro/Rankit plot of standardized residuals, show that the error terms may have been heteroscedastic, and that the error terms do not strongly resemble a normal distribution. The model constructed by grouping the data for AETC and ACC exhibited neither the goodness of fit nor the model aptness of the previous grouping, even though the installations in these two commands are more similar in size than those in AMC and ACC (See Tables 4-11 and 4-12).

Table 4-15
Correlation Matrix (AETC and ACC Bases)

```
STATISTIX 4.1                                                  , 09/20/95, 10:31

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

            HDD       CDD       CHDD      SQFT
CDD         0.0233
  P-VALUE   0.3281

CHDD        0.8654    0.5211
            0.0000    0.0000

SQFT        0.5632    0.5548    0.7589
            0.0000    0.0000    0.0000

MBTU        0.7858    0.4386    0.8907    0.7459
            0.0000    0.0000    0.0000    0.0000

CASES INCLUDED 1756   MISSING CASES 164
```

Table 4-16
Regression Analysis Table (AETC and ACC Bases)

```
STATISTIX 4.1                                          CAHUNA, 11/07/95,
16:08

UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU

PREDICTOR
VARIABLES    COEFFICIENT    STD ERROR     STUDENT'S T       P       VIF
---------    -----------    ---------     -----------    ------    -----
CONSTANT        0.00847     3.474E-04        24.39       0.0000
SQFT         -6.987E-07     7.542E-08        -9.26       0.0000      1.0
CHDD          1.442E-05     4.540E-07        31.77       0.0000      1.0

R-SQUARED           0.3799      RESIDUAL MEAN SQUARE (MSE)  3.015E-05
ADJUSTED R-SQUARED  0.3792      STANDARD ERROR OF ESTIMATE    0.00549

SOURCE        DF       SS           MS          F        P
----------    ---   ----------   ----------   -----   ------
REGRESSION     2     0.03237      0.01619   536.91   0.0000
RESIDUAL    1753     0.05284    3.015E-05
TOTAL       1755     0.08521

CASES INCLUDED 1756   MISSING CASES 0
```

ACC Only

The graphical presentation of this data is found in Appendix G. The histogram and box and whiskers plots (Figures G-1 and G-2) show the same right skew seen in the other data groups, while the Wilk-Shapiro/Rankit plot (Figure G-3) shows that the data approximate a normal distribution. The scatter plots of MBTU versus HDD and CHDD (Figures G-4 and G-6) show an apparent positive linear relationship, while those for CDD and SQFT (Figures G-5 and G-7) show no easily discernible trend.

Table 4-17 shows the results of the correlation analysis. HDD, CHDD, and SQFT are all strongly correlated, while CDD is weakly correlated. Based on this information, a linear regression model was constructed using the three strongly correlated variables. The results are given in table 4-18. The regression model shows that, as in previous cases, all of the variables except for SQFT had positive coefficients; its coefficient was negative. The P-values show that all of the coefficients obtained were statistically significant at $\alpha = 0.05$. The R^2 value is the highest obtained thus far.

The plot of standardized residuals versus fitted values (Figure G-8) appears to show homoscedasticity. The Wilk-Shapiro/Rankit plot (Figure G-9) shows that the data approximate a normal distribution. So, it appears that the basic assumptions of the linear regression model have been met for this data set.

Table 4-17
Correlation Matrix (ACC Bases)

```
STATISTIX 4.1                                                  , 09/20/95, 10:51

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

            HDD       CDD       CHDD      SQFT
CDD         0.0218
  P-VALUE   0.5007

CHDD        0.9134    0.4268
            0.0000    0.0000

SQFT        0.6319    0.5595    0.7994
            0.0000    0.0000    0.0000

MBTU        0.8688    0.3731    0.9378    0.8602
            0.0000    0.0000    0.0000    0.0000

CASES INCLUDED 957   MISSING CASES 0
```

Table 4-18
Regression Analysis Table (ACC Bases)

```
STATISTIX 4.1                                                  , 09/25/95, 10:50

UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU

PREDICTOR
VARIABLES    COEFFICIENT    STD ERROR     STUDENT'S T       P       VIF
---------    -----------    ---------     -----------    ------    -----
CONSTANT        0.00823     3.775E-04        21.81       0.0000
CHDD          3.013E-06     6.609E-07         4.56       0.0000      4.7
HDD           1.159E-05     5.447E-07        21.27       0.0000      4.7
SQFT         -2.088E-07     9.835E-08        -2.12       0.0340      1.0

R-SQUARED           0.7579      RESIDUAL MEAN SQUARE (MSE)  1.033E-05
ADJUSTED R-SQUARED  0.7572      STANDARD ERROR OF ESTIMATE    0.00321

SOURCE        DF       SS           MS          F        P
----------   ---   ----------   ----------   -----   ------
REGRESSION     3     0.03082      0.01027   994.64   0.0000
RESIDUAL     953     0.00984    1.033E-05
TOTAL        956     0.04067

CASES INCLUDED 957   MISSING CASES 0
```

ACC With Supplemental Data. As described in the previous chapter, a WIMS report was used to collect additional data from bases in ACC. This report was sent by electronic mail to all ACC bases; unfortunately only ten responses were received. One of the responses was found to be erroneous in the area of maintenance facility area; the quantity generated by the report exceeded the total facility floor area reported annually to AFCESA. The data for the base in question was therefore discarded. The data for the nine bases which was used in this section is located at Appendix B.

The histogram of data (Figure H-1) shows the same right skew that has been present in the previous data subsets. However, the box and whiskers plot (Figure H-2) shows the presence of fewer outliers than in previous cases, possibly due to the smaller data set. According to the Wilk-Shapiro/Rankit plot (Figure H-3) and its accompanying statistic, the data for MBTU approximate a normal distribution. Scatter plots of MBTU versus HDD, CDD, CHDD, SQFT, AGE, and MAINT are located at Figures H-4 through H-9. HDD and CHDD show evidence of linear behavior by visual inspection, while CDD seems to lack it; for the other variables it is hard to discern a pattern because these are annual observations while MBTU is recorded monthly.

Table 4-19 shows the results of a correlation analysis performed using data from these nine bases. All of the variables except for CDD were seen to be strongly correlated with MBTU, and therefore were included in the linear regression model.

Table 4-20 shows the results of this regression analysis. All of the coefficients in this case are positive. However, the constant β_0, SQFT, and MAINT were not determined to be statistically significant at $\alpha = 0.05$, since the P-values were greater than 0.05. The plot of standardized

residuals versus fitted values (Figure H-10) and the Wilk-Shapiro/Rankit plot (Figure H-11) show that the data appear to be homoscedastic and approximately normally distributed.

Table 4-19
Correlation Matrix (ACC Bases with Supplemental Data)

STATISTIX 4.1 , 09/20/95, 15:25

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

	HDD	CDD	CHDD	SQFT	MAINT	AGE
CDD	0.0283					
P-VALUE	0.5637					
CHDD	0.8665	0.5234				
	0.0000	0.0000				
SQFT	0.6351	0.5907	0.8363			
	0.0000	0.0000	0.0000			
MAINT	0.5754	0.5479	0.7641	0.7787		
	0.0000	0.0000	0.0000	0.0000		
AGE	0.6412	0.6405	0.8664	0.9553	0.8730	
	0.0000	0.0000	0.0000	0.0000	0.0000	
MBTU	0.8363	0.4509	0.9380	0.8932	0.8233	0.9271
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CASES INCLUDED 420 MISSING CASES 0

Table 4-20
Regression Analysis (ACC Bases w/ Supplemental Data)

```
STATISTIX 4.1                                              CAHUNA, 11/07/95,
16:23

UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU

PREDICTOR
VARIABLES    COEFFICIENT    STD ERROR     STUDENT'S T       P        VIF
---------    -----------    ---------     -----------    ------    -----
CONSTANT       -0.00338       0.00139        -2.44       0.0151
SQFT          2.507E-07     1.720E-07         1.46       0.1458      1.6
CHDD          1.346E-05     6.167E-07        21.83       0.0000      1.1
AGE           3.186E-04     6.310E-05         5.05       0.0000      1.6
MAINT           0.00298     4.232E-04         7.04       0.0000      1.2

R-SQUARED           0.5923      RESIDUAL MEAN SQUARE (MSE)  1.142E-05
ADJUSTED R-SQUARED  0.5888      STANDARD ERROR OF ESTIMATE    0.00338

SOURCE         DF       SS           MS          F        P
----------    ---   ----------   ----------   -----   ------
REGRESSION      4     0.00768      0.00192   168.15   0.0000
RESIDUAL      463     0.00529    1.142E-05
TOTAL         467     0.01297

CASES INCLUDED 468   MISSING CASES 489
```

Analysis of Bases by Flying/Nonflying Mission

Flying Mission. The histogram and box and whiskers plots (Figures 4-10 and 4-11) show the familiar right skew. The scatter plots of HDD and CHDD (Figures 4-13 and 4-15) show a positive linear relationship, while those for CDD and SQFT (Figures 4-14 and 4-16) are inconclusive. Table 4-21 shows the results of the correlation analysis performed on this data set. HDD and CHDD were strongly correlated, while SQFT was moderately correlated, so these three variables were included in the regression model. CDD was omitted because it was only weakly correlated. The results of the regression analysis are given in Table 4-22. In this case, all of the variables had positive coefficients, which is a departure from the previous analyses in which SQFT

was found to have a negative coefficient. All of the variables' coefficients were found to be statistically significant at $\alpha = 0.05$. The R^2 value obtained for this model and the P-value of 0.0000 indicate that the model fits this data set.

Figure 4-17, the plot of standardized residuals versus fitted values, appears to show homoscedasticity. The Wilk-Shapiro/Rankit plot of standardized residuals (Figure 4-18) shows that the residuals strongly approximate a normal distribution, and that the assumptions of the linear regression model appear to have been met.

Nonflying Mission. The graphs for this set of observations is found in Appendix I. The histogram and the box and whiskers plot (Figures I-1 and I-2) show a very large number of outliers and a strong skew to the right. The scatter plots (Figures I-4 through I-7) show the same tendencies as earlier data sets; HDD and CHDD (Figures I-4 and I-6) show an apparent positive linear relationship, while CDD and SQFT (Figures I-5 and I-7) are inconclusive. The results of the correlation analysis (Table 4-23) show that HDD and CHDD are moderately correlated with MBTU, while CDD and SQFT are weakly correlated. These results are statistically significant at $\alpha = 0.05$. The correlation coefficients obtained here are lower than for previous groupings. The two variables which were moderately correlated were included in the linear regression model, the results of which are given in Table 4-24. The only variable for which a coefficient was found which was significant at a = 0.05 was HDD. The R^2 value shows that this linear regression model fit the data set poorly. The plot of standardized residuals versus fitted values (Figure I-8) shows that the data appear to be heteroscedastic. The Wilk-Shapiro/Rankit plot (Figure I-9) shows that the residuals do not approximate a normal distribution. Therefore, the linear model is not applicable to this data set.

Table 4-21
Correlation Matrix (Flying Bases)

```
STATISTIX 4.1                                                    , 09/28/95,
10:33

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

            HDD       CDD       CHDD      SQFT
CDD         0.0217
  P-VALUE   0.3147

CHDD        0.9100    0.4343
            0.0000    0.0000

SQFT        0.5793    0.4899    0.7251
            0.0000    0.0000    0.0000

MBTU        0.8568    0.3620    0.9221    0.7877
            0.0000    0.0000    0.0000    0.0000

CASES INCLUDED 2151   MISSING CASES 0
```

Table 4-22
Regression Analysis (Flying Bases)

```
STATISTIX 4.1                                          CAHUNA, 11/07/95,
16:34
UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU
PREDICTOR
VARIABLES    COEFFICIENT    STD ERROR     STUDENT'S T       P       VIF
---------    -----------    ---------     -----------    ------    -----
CONSTANT        0.00492     2.673E-04        18.42       0.0000
SQFT          1.923E-07     5.276E-08         3.65       0.0003      1.0
CHDD          1.611E-05     3.228E-07        49.91       0.0000      1.0

R-SQUARED           0.5381      RESIDUAL MEAN SQUARE (MSE)  2.316E-05
ADJUSTED R-SQUARED  0.5377      STANDARD ERROR OF ESTIMATE    0.00481

SOURCE        DF       SS           MS          F        P
----------   ---   ----------   ----------   -----   ------
REGRESSION     2     0.05795      0.02897  1251.24   0.0000
RESIDUAL    2148     0.04974    2.316E-05
TOTAL       2150     0.10768
CASES INCLUDED 2151   MISSING CASES 0
```

Figure 4-10
Histogram (Flying Bases)

Figure 4-11
Box and Whisker Plot (Flying Bases)

Figure 4-12
Wilk-Shapiro/Rankit Plot (Flying Bases)

Figure 4-13
Scatter Plot: MBTU vs. HDD (Flying Bases)

Figure 4-14
Scatter Plot: MBTU vs. CDD (Flying Bases)

Figure 4-15
Scatter Plot: MBTU vs. CHDD (Flying Bases)

Figure 4-16
Scatter Plot: MBTU vs. SQFT (Flying Bases)

Figure 4-17
Plot of Standardized Residuals vs. Fitted Values (Flying Bases)

Figure 4-18
Wilk-Shapiro/Rankit Plot of Standardized Residuals (Flying Bases)

Table 4-23
Correlation Matrix (Nonflying Bases)

```
STATISTIX 4.1                                                    , 09/28/95,
14:24

CORRELATIONS (PEARSON)
ZERO INTERCEPT OPTION SELECTED: CORRELATIONS = COSINES

           HDD       CDD       CHDD      SQFT
CDD        0.0248
  P-VALUE  0.4013

CHDD       0.8661    0.5213
           0.0000    0.0000

SQFT       0.4785    0.4978    0.6574
           0.0000    0.0000    0.0000

MBTU       0.5757    0.3661    0.6745    0.4446
           0.0000    0.0000    0.0000    0.0000

CASES INCLUDED 1144   MISSING CASES 0
```

Table 4-24
Regression Analysis Table (Nonflying Bases)

```
STATISTIX 4.1                                          CAHUNA, 11/07/95,
16:45

UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF MBTU

PREDICTOR
VARIABLES    COEFFICIENT    STD ERROR     STUDENT'S T       P
---------    -----------    ---------     -----------    ------
CONSTANT        0.01224       0.00111        10.99       0.0000
CHDD          1.625E-05     2.260E-06         7.19       0.0000

R-SQUARED           0.0433      RESIDUAL MEAN SQUARE (MSE)  3.722E-04
ADJUSTED R-SQUARED  0.0425      STANDARD ERROR OF ESTIMATE    0.01929

SOURCE        DF       SS           MS         F        P
----------   ---   ----------   ----------   -----   ------
REGRESSION     1     0.01925      0.01925    51.71   0.0000
RESIDUAL    1142     0.42509    3.722E-04
TOTAL       1143     0.44434

CASES INCLUDED 1144   MISSING CASES 0
```

Summary

This chapter has presented the results of analyzing the data obtained from the DUERS report, as well as supplemental data obtained for nine ACC bases. When a model was constructed for all of the bases in this data set, it was found to be improper because the data did not fulfill the basic assumptions of the linear regression model. Four prospective methods for dividing the data set into subgroups were evaluated: by MAJCOM, by flying versus nonflying mission, by presence of a depot, and by fiscal year. Two of these, MAJCOM and flying/nonflying mission, were found to have substantially different mean levels of energy consumption.

By dividing the data into subsets by Major Command, much better results were obtained. The most satisfactory models were those constructed using data from bases in the commands whose major activity is flying operations: AMC, ACC, and AETC. The model constructed for AFMC and SPC demonstrated a poor fit. Adding variables which describe a bases infrastructure showed that these variables, MAINT and AGE, enhanced the ability to predict energy consumption when included in a linear regression model. The primary effect of dividing the data into subgroups seemed to be a reduction in the number of outliers and their effect on the linear regression model. There were two separate types of outliers which became apparent as the research progressed: The first was extreme values of either the dependent or independent variable for an individual installation. This could take the form of an unusually hot or cold month, or of an abnormally high or low level of energy consumption. The second type of outlier results from an installation which consistently produces extreme values of either the

dependent or independent variables in comparison with the other installations. Dividing the data into subgroups seemed to have the effect of reducing the number of the second type of outliers.

A large number of outliers were consistently seen above the apparent regression line in the plots of MBTU vs. CHDD. These may have occurred during periods when both the heating and cooling systems were operating. During the "transition months", wide swings may occur in mean daily temperature, which may have resulted in the systems' being unable to operate at a constant rate. This could conceivably have caused inefficiencies which would result in a higher energy consumption rate.

Dividing the data into two groups by flying versus nonflying mission showed that energy consumption at the bases with a flying mission could be successfully modeled using the existing set of variables, while the bases without a flying mission could not be modeled using the same techniques and variables.

V. Conclusions

Results of Research

Two objectives were identified in Chapter I: 1) To identify factors inherent to Air Force installations which influence energy consumption, and 2) To use these factors to develop a model or models which can be used to predict energy consumption at an Air Force base. The research and analysis described in previous chapters was directed toward these two goals.

First Research Objective. In the previous chapter, analysis of the data showed that climatic factors had the strongest influence on energy consumption per square foot. Cooling Degree Days, however, were consistently weakly correlated with energy consumption, and this variable was not included in any of the linear regression models. Heating Degree Days was often strongly correlated with energy consumption, as was the sum of Heating and Cooling Degree Days. The coefficient for these variables in all of the various regression models was positive. This is the expected result, as departure from a mean daily temperature of 65 degrees Fahrenheit will cause increased use of heating, ventilating, and air conditioning HVAC systems.

There are at least two possible explanations for the weak correlation between energy consumption and Cooling Degree Days:

1) The HVAC systems used to cool facilities at the installations studied in this thesis is inherently more efficient than that which is used to heat them.

2) All of the facilities at a given installation must be heated to a certain minimum temperature, while not all facilities must be cooled. During periods when the outside temperature drops below the freezing point, facilities must be heated in order to prevent damage to plumbing and fire-suppression systems. Cooling is primarily used to maintain a comfortable indoor working

environment. The exceptions to this would be the case of cold-storage facilities, and computer and communications facilities which must be cooled to offset the heat produced by electronic equipment.

In all but one of the regression models, square feet of facility floor space was found to be correlated with energy consumption, but its coefficient was negative. This would seem to indicate that larger installations are able to operate more efficiently, but the author has no explanation for this behavior. This variable was found to have a significant influence on energy consumption in only some of the models.

The two additional variables which were obtained for nine selected ACC bases, mean age of facilities and ratio of large maintenance facilities to total facility area, were found to be strongly correlated with energy consumption. However, when the linear regression model was constructed, only age was a significant influence. As was expected, energy consumption tended to increase as the mean age of facilities increased.

ANOVA analysis showed that dividing the data set into groups by major command and flying versus nonflying mission was valid, while there was no noticeable difference in energy consumption between those bases with a depot and those without. The factors in the first two analyses, however, were essentially very much the same, since the flying mission in the CONUS in concentrated in AMC, ACC, and AETC.

The final ANOVA analysis showed that there has been no significant annual reduction in mean monthly energy consumption per square foot for the four years considered in this thesis. This indicates that using only energy consumption per square foot as a measure of merit may not

be practical; baselining using some form of regression model such as the ones constructed in this thesis would more realistically assess our energy conservation efforts.

Second Research Objective. Construction of a single linear regression model to predict energy consumption per square foot at any given Air Force base is not feasible. It appears that an adequate model could be constructed for the Major Commands whose major mission involves flight operations. When the data was separated into flying and nonflying bases, it was shown that the data for flying bases met the basic assumptions for the application of the linear regression model, while that for nonflying bases did not. This may be due to the fact that flying bases tend to have a fixed configuration, e.g. aircraft maintenance facilities, warehouse space, flight operations buildings, etc., while nonflying bases are much more diverse.

The linear regression models constructed for the flying commands were found to provide statistically significant predictions of energy consumption at a = 0.05, with most R^2 values falling between 0.50 and 0.75. The analysis showed that modeling energy consumption with a multiple linear regression model is feasible for bases with a flying mission.

Recommendations for Further Research

There are three areas in which further research could improve upon the results of this thesis. The first would be to try to obtain more data on age and types of facilities at the various installations. While the data collected from the nine ACC bases was shown to be correlated with energy consumption at these bases, the sample was by no means complete. A larger number of bases would more fully enable the researcher to explore the impact of these variables on energy consumption.

Second, additional factors which may influence energy consumption could be considered. This is particularly true of the bases which do not have an active flying mission; this thesis showed that using the independent variables described herein, the linear regression model is not appropriate for these bases. Additional factors could be investigated which would allow the use of this powerful model to predict energy consumption at these bases.

Finally, other models could be applied to this type of data which might better predict energy consumption. All of the histograms examined in this thesis showed some degree of right skew, which could indicate the applicability of a logarithmic model. In addition, the data could be modeled on a time-series basis, since all of the observations were consecutive over a period of four years.

Conclusions

This thesis showed the feasibility of modeling energy consumption. As stated earlier, reducing our energy consumption has been a stated goal of the DoD since the mid-1970's. With the advent of pollution prevention programs, of which energy conservation is a part, this subject has increased in importance and will continue to do so. Since 1975, several goals for reduction of energy consumption have been established and tracked since that time; however, none has addressed the effects of external influences on our ability to meet energy use reduction goals. Conducting the research necessary to develop models against which our consumption could be baselined would allow us to more accurately measure the effectiveness of our conservation efforts, and to more effectively manage our energy use reduction programs.

Appendix A

STATISTIX 4.1 , 09/26/95, 9:22

VIEW DATA

CASE	BASE	FY	HDD	CDD	SQFT	MBTU	CMD	FLY	DEPOT
1	33.000	94.000	142.00	101.00	4163.0	0.0088	ACC	Y	N
2	33.000	94.000	420.00	16.000	4163.0	0.0084	ACC	Y	N
3	33.000	94.000	541.00	1.0000	4163.0	0.0123	ACC	Y	N
4	33.000	94.000	625.00	0.0000	4163.0	0.0133	ACC	Y	N
5	33.000	94.000	442.00	9.0000	4163.0	0.0109	ACC	Y	N
6	33.000	94.000	295.00	11.000	4163.0	0.0092	ACC	Y	N
7	33.000	94.000	109.00	103.00	4163.0	0.0068	ACC	Y	N
8	33.000	94.000	31.000	152.00	4163.0	0.0068	ACC	Y	N
9	33.000	94.000	0.0000	430.00	4163.0	0.0078	ACC	Y	N
10	33.000	94.000	0.0000	464.00	4163.0	0.0064	ACC	Y	N
11	33.000	94.000	0.0000	414.00	4163.0	0.0059	ACC	Y	N
12	33.000	94.000	12.000	269.00	4163.0	0.0057	ACC	Y	N
13	34.000	94.000	0.0000	0.0000	2773.0	0.0051	ACC	Y	N
14	34.000	94.000	0.0000	0.0000	2773.0	0.0061	ACC	Y	N
15	34.000	94.000	0.0000	0.0000	2773.0	0.0106	ACC	Y	N
16	34.000	94.000	0.0000	0.0000	2773.0	0.0118	ACC	Y	N
17	34.000	94.000	0.0000	0.0000	2773.0	0.0107	ACC	Y	N
18	34.000	94.000	0.0000	0.0000	2773.0	0.0073	ACC	Y	N
19	34.000	94.000	0.0000	0.0000	2773.0	0.0054	ACC	Y	N
20	34.000	94.000	0.0000	0.0000	2773.0	0.0053	ACC	Y	N
21	34.000	94.000	0.0000	309.00	2773.0	0.0065	ACC	Y	N
22	34.000	94.000	0.0000	437.00	2773.0	0.0072	ACC	Y	N
23	34.000	94.000	0.0000	423.00	2773.0	0.0071	ACC	Y	N
24	34.000	94.000	0.0000	290.00	2773.0	0.0059	ACC	Y	N
25	35.000	94.000	295.00	11.000	2339.0	0.0116	ACC	Y	N
26	35.000	94.000	680.00	0.0000	2339.0	0.0221	ACC	Y	N
27	35.000	94.000	675.00	0.0000	2339.0	0.0201	ACC	Y	N
28	35.000	94.000	762.00	0.0000	2339.0	0.0201	ACC	Y	N
29	35.000	94.000	664.00	0.0000	2339.0	0.0186	ACC	Y	N
30	35.000	94.000	459.00	0.0000	2339.0	0.0171	ACC	Y	N
31	35.000	94.000	247.00	8.0000	2339.0	0.0098	ACC	Y	N
32	35.000	94.000	70.000	100.00	2339.0	0.0092	ACC	Y	N
33	35.000	94.000	0.0000	437.00	2339.0	0.0094	ACC	Y	N
34	35.000	94.000	0.0000	465.00	2339.0	0.0091	ACC	Y	N
35	35.000	94.000	0.0000	385.00	2339.0	0.0092	ACC	Y	N
36	35.000	94.000	18.000	199.00	2339.0	0.0082	ACC	Y	N
37	36.000	94.000	35.000	49.000	2779.0	0.0067	ACC	Y	N
38	36.000	94.000	394.00	5.0000	2779.0	0.0102	ACC	Y	N
39	36.000	94.000	600.00	0.0000	2779.0	0.0133	ACC	Y	N
40	36.000	94.000	534.00	0.0000	2779.0	0.0136	ACC	Y	N
41	36.000	94.000	463.00	0.0000	2779.0	0.0113	ACC	Y	N
42	36.000	94.000	219.00	0.0000	2779.0	0.0095	ACC	Y	N
43	36.000	94.000	125.00	21.000	2779.0	0.0074	ACC	Y	N
44	36.000	94.000	48.000	93.000	2779.0	0.0068	ACC	Y	N
45	36.000	94.000	0.0000	324.00	2779.0	0.0073	ACC	Y	N
46	36.000	94.000	0.0000	0.0000	2779.0	0.0080	ACC	Y	N
47	36.000	94.000	0.0000	349.00	2779.0	0.0079	ACC	Y	N
48	36.000	94.000	0.0000	0.0000	2779.0	0.0072	ACC	Y	N
49	37.000	94.000	12.000	217.00	3855.0	0.0057	ACC	Y	N
50	37.000	94.000	205.00	7.0000	3855.0	0.0063	ACC	Y	N
51	37.000	94.000	371.00	4.0000	3855.0	0.0100	ACC	Y	N
52	37.000	94.000	358.00	0.0000	3855.0	0.0089	ACC	Y	N
53	37.000	94.000	299.00	4.0000	3855.0	0.0101	ACC	Y	N
54	37.000	94.000	116.00	26.000	3855.0	0.0089	ACC	Y	N
55	37.000	94.000	52.000	151.00	3855.0	0.0086	ACC	Y	N
56	37.000	94.000	1.0000	292.00	3855.0	0.0067	ACC	Y	N

57	37.000	94.000	0.0000	702.00	3855.0	0.0080	ACC	Y	N
58	37.000	94.000	0.0000	740.00	3855.0	0.0076	ACC	Y	N
59	37.000	94.000	0.0000	731.00	3855.0	0.0067	ACC	Y	N
60	37.000	94.000	0.0000	527.00	3855.0	0.0072	ACC	Y	N
61	38.000	94.000	193.00	115.00	3102.0	0.0076	ACC	Y	N
62	38.000	94.000	531.00	9.0000	3102.0	0.0128	ACC	Y	N
63	38.000	94.000	521.00	3.0000	3102.0	0.0144	ACC	Y	N
64	38.000	94.000	703.00	1.0000	3102.0	0.0178	ACC	Y	N
65	38.000	94.000	715.00	1.0000	3102.0	0.0177	ACC	Y	N
66	38.000	94.000	268.00	54.000	3102.0	0.0119	ACC	Y	N
67	38.000	94.000	192.00	112.00	3102.0	0.0084	ACC	Y	N
68	38.000	94.000	32.000	197.00	3102.0	0.0077	ACC	Y	N
69	38.000	94.000	67.000	573.00	3102.0	0.0080	ACC	Y	N
70	38.000	94.000	1.0000	618.00	3102.0	0.0088	ACC	Y	N
71	38.000	94.000	1.0000	593.00	3102.0	0.0079	ACC	Y	N
72	38.000	94.000	79.000	268.00	3102.0	0.0074	ACC	Y	N
73	39.000	94.000	576.00	7.0000	4917.0	0.0112	ACC	Y	N
74	39.000	94.000	1024.0	0.0000	4917.0	0.0161	ACC	Y	N
75	39.000	94.000	1066.0	0.0000	4917.0	0.0170	ACC	Y	N
76	39.000	94.000	1403.0	0.0000	4917.0	0.0191	ACC	Y	N
77	39.000	94.000	1294.0	0.0000	4917.0	0.0183	ACC	Y	N
78	39.000	94.000	791.00	0.0000	4917.0	0.0135	ACC	Y	N
79	39.000	94.000	589.00	0.0000	4917.0	0.0112	ACC	Y	N
80	39.000	94.000	168.00	37.000	4917.0	0.0070	ACC	Y	N
81	39.000	94.000	32.000	150.00	4917.0	0.0052	ACC	Y	N
82	39.000	94.000	9.0000	193.00	4917.0	0.0055	ACC	Y	N
83	39.000	94.000	17.000	280.00	4917.0	0.0059	ACC	Y	N
84	39.000	94.000	79.000	97.000	4917.0	0.0059	ACC	Y	N
85	40.000	94.000	563.00	0.0000	4820.0	0.0195	ACC	Y	N
86	40.000	94.000	811.00	0.0000	4820.0	0.0228	ACC	Y	N
87	40.000	94.000	1150.0	0.0000	4820.0	0.0260	ACC	Y	N
88	40.000	94.000	1695.0	0.0000	4820.0	0.0316	ACC	Y	N
89	40.000	94.000	1332.0	0.0000	4820.0	0.0280	ACC	Y	N
90	40.000	94.000	1081.0	0.0000	4820.0	0.0268	ACC	Y	N
91	40.000	94.000	560.00	5.0000	4820.0	0.0210	ACC	Y	N
92	40.000	94.000	384.00	21.000	4820.0	0.0087	ACC	Y	N
93	40.000	94.000	133.00	118.00	4820.0	0.0060	ACC	Y	N
94	40.000	94.000	0.0000	214.00	4820.0	0.0052	ACC	Y	N
95	40.000	94.000	54.000	113.00	4820.0	0.0060	ACC	Y	N
96	40.000	94.000	197.00	30.000	4820.0	0.0108	ACC	Y	N
97	41.000	94.000	213.00	18.000	4624.0	0.0064	ACC	Y	N
98	41.000	94.000	562.00	0.0000	4624.0	0.0123	ACC	Y	N
99	41.000	94.000	780.00	0.0000	4624.0	0.0166	ACC	Y	N
100	41.000	94.000	759.00	0.0000	4624.0	0.0155	ACC	Y	N
101	41.000	94.000	598.00	0.0000	4624.0	0.0121	ACC	Y	N
102	41.000	94.000	368.00	1.0000	4624.0	0.0100	ACC	Y	N
103	41.000	94.000	144.00	12.000	4624.0	0.0068	ACC	Y	N
104	41.000	94.000	13.000	152.00	4624.0	0.0066	ACC	Y	N
105	41.000	94.000	0.0000	535.00	4624.0	0.0064	ACC	Y	N
106	41.000	94.000	0.0000	524.00	4624.0	0.0061	ACC	Y	N
107	41.000	94.000	0.0000	492.00	4624.0	0.0072	ACC	Y	N
108	41.000	94.000	2.0000	206.00	4624.0	0.0057	ACC	Y	N
109	42.000	94.000	655.00	0.0000	2316.0	0.0180	ACC	Y	N
110	42.000	94.000	980.00	0.0000	2316.0	0.0251	ACC	Y	N
111	42.000	94.000	1240.0	0.0000	2316.0	0.0284	ACC	Y	N
112	42.000	94.000	1756.0	0.0000	2316.0	0.0349	ACC	Y	N
113	42.000	94.000	1498.0	0.0000	2316.0	0.0301	ACC	Y	N
114	42.000	94.000	1051.0	0.0000	2316.0	0.0251	ACC	Y	N
115	42.000	94.000	750.00	0.0000	2316.0	0.0282	ACC	Y	N
116	42.000	94.000	371.00	0.0000	2316.0	0.0175	ACC	Y	N
117	42.000	94.000	152.00	3.0000	2316.0	0.0116	ACC	Y	N
118	42.000	94.000	59.000	84.000	2316.0	0.0124	ACC	Y	N
119	42.000	94.000	86.000	54.000	2316.0	0.0129	ACC	Y	N
120	42.000	94.000	170.00	47.000	2316.0	0.0135	ACC	Y	N
121	43.000	94.000	139.00	35.000	4306.0	0.0078	ACC	Y	N
122	43.000	94.000	379.00	18.000	4306.0	0.0129	ACC	Y	N
123	43.000	94.000	743.00	0.0000	4306.0	0.0149	ACC	Y	N
124	43.000	94.000	896.00	0.0000	4306.0	0.0210	ACC	Y	N
125	43.000	94.000	635.00	0.0000	4306.0	0.0185	ACC	Y	N
126	43.000	94.000	447.00	9.0000	4306.0	0.0179	ACC	Y	N
127	43.000	94.000	121.00	99.000	4306.0	0.0104	ACC	Y	N

128	43.000	94.000	137.00	62.000	4306.0	0.0070	ACC	Y	N
129	43.000	94.000	0.0000	384.00	4306.0	0.0076	ACC	Y	N
130	43.000	94.000	0.0000	496.00	4306.0	0.0102	ACC	Y	N
131	43.000	94.000	0.0000	315.00	4306.0	0.0095	ACC	Y	N
132	43.000	94.000	5.0000	166.00	4306.0	0.0083	ACC	Y	N
133	44.000	94.000	209.00	49.000	3160.0	0.0086	ACC	Y	N
134	44.000	94.000	574.00	66.000	3160.0	0.0140	ACC	Y	N
135	44.000	94.000	682.00	0.0000	3160.0	0.0161	ACC	Y	N
136	44.000	94.000	894.00	0.0000	3160.0	0.0204	ACC	Y	N
137	44.000	94.000	596.00	0.0000	3160.0	0.0153	ACC	Y	N
138	44.000	94.000	499.00	7.0000	3160.0	0.0130	ACC	Y	N
139	44.000	94.000	119.00	120.00	3160.0	0.0091	ACC	Y	N
140	44.000	94.000	59.000	130.00	3160.0	0.0084	ACC	Y	N
141	44.000	94.000	0.0000	488.00	3160.0	0.0091	ACC	Y	N
142	44.000	94.000	0.0000	434.00	3160.0	0.0090	ACC	Y	N
143	44.000	94.000	0.0000	388.00	3160.0	0.0089	ACC	Y	N
144	44.000	94.000	27.000	217.00	3160.0	0.0058	ACC	Y	N
145	45.000	94.000	773.00	0.0000	3750.0	0.0189	ACC	Y	N
146	45.000	94.000	1048.0	0.0000	3750.0	0.0238	ACC	Y	N
147	45.000	94.000	1066.0	0.0000	3750.0	0.0329	ACC	Y	N
148	45.000	94.000	2007.0	0.0000	3750.0	0.0334	ACC	Y	N
149	45.000	94.000	1575.0	0.0000	3750.0	0.0241	ACC	Y	N
150	45.000	94.000	1275.0	0.0000	3750.0	0.0199	ACC	Y	N
151	45.000	94.000	774.00	0.0000	3750.0	0.0166	ACC	Y	N
152	45.000	94.000	422.00	0.0000	3750.0	0.0130	ACC	Y	N
153	45.000	94.000	182.00	40.000	3750.0	0.0082	ACC	Y	N
154	45.000	94.000	76.000	70.000	3750.0	0.0029	ACC	Y	N
155	45.000	94.000	49.000	67.000	3750.0	0.0044	ACC	Y	N
156	45.000	94.000	304.00	6.0000	3750.0	0.0091	ACC	Y	N
157	46.000	94.000	3.0000	355.00	3867.0	0.0081	ACC	Y	N
158	46.000	94.000	35.000	165.00	3867.0	0.0072	ACC	Y	N
159	46.000	94.000	146.00	20.000	3867.0	0.0072	ACC	Y	N
160	46.000	94.000	137.00	38.000	3867.0	0.0067	ACC	Y	N
161	46.000	94.000	53.000	125.00	3867.0	0.0071	ACC	Y	N
162	46.000	94.000	39.000	160.00	3867.0	0.0062	ACC	Y	N
163	46.000	94.000	1.0000	286.00	3867.0	0.0072	ACC	Y	N
164	46.000	94.000	0.0000	338.00	3867.0	0.0076	ACC	Y	N
165	46.000	94.000	65.000	409.00	3867.0	0.0082	ACC	Y	N
166	46.000	94.000	0.0000	381.00	3867.0	0.0079	ACC	Y	N
167	46.000	94.000	0.0000	392.00	3867.0	0.0078	ACC	Y	N
168	46.000	94.000	0.0000	565.00	3867.0	0.0086	ACC	Y	N
169	47.000	94.000	729.00	0.0000	3365.0	0.0214	ACC	Y	N
170	47.000	94.000	1180.0	0.0000	3365.0	0.0269	ACC	Y	N
171	47.000	94.000	1465.0	0.0000	3365.0	0.0298	ACC	Y	N
172	47.000	94.000	2081.0	0.0000	3365.0	0.0363	ACC	Y	N
173	47.000	94.000	1720.0	0.0000	3365.0	0.0323	ACC	Y	N
174	47.000	94.000	1027.0	0.0000	3365.0	0.0256	ACC	Y	N
175	47.000	94.000	700.00	0.0000	3365.0	0.0217	ACC	Y	N
176	47.000	94.000	229.00	15.000	3365.0	0.0141	ACC	Y	N
177	47.000	94.000	79.000	36.000	3365.0	0.0107	ACC	Y	N
178	47.000	94.000	31.000	101.00	3365.0	0.0103	ACC	Y	N
179	47.000	94.000	72.000	131.00	3365.0	0.0099	ACC	Y	N
180	47.000	94.000	0.0000	0.0000	3365.0	0.0112	ACC	Y	N
181	48.000	94.000	0.0000	190.00	1847.0	0.0076	ACC	Y	N
182	48.000	94.000	166.00	63.000	1847.0	0.0074	ACC	Y	N
183	48.000	94.000	400.00	2.0000	1847.0	0.0100	ACC	Y	N
184	48.000	94.000	0.0000	0.0000	1847.0	0.0119	ACC	Y	N
185	48.000	94.000	128.00	48.000	1847.0	0.0084	ACC	Y	N
186	48.000	94.000	0.0000	0.0000	1847.0	0.0083	ACC	Y	N
187	48.000	94.000	14.000	200.00	1847.0	0.0066	ACC	Y	N
188	48.000	94.000	2.0000	313.00	1847.0	0.0073	ACC	Y	N
189	48.000	94.000	0.0000	0.0000	1847.0	0.0079	ACC	Y	N
190	48.000	94.000	0.0000	461.00	1847.0	0.0080	ACC	Y	N
191	48.000	94.000	0.0000	450.00	1847.0	0.0082	ACC	Y	N
192	48.000	94.000	0.0000	274.00	1847.0	0.0079	ACC	Y	N
193	49.000	94.000	403.00	3.0000	2478.0	0.0169	ACC	Y	N
194	49.000	94.000	999.00	0.0000	2478.0	0.0206	ACC	Y	N
195	49.000	94.000	1036.0	0.0000	2478.0	0.0241	ACC	Y	N
196	49.000	94.000	1014.0	0.0000	2478.0	0.0231	ACC	Y	N
197	49.000	94.000	973.00	0.0000	2478.0	0.0216	ACC	Y	N
198	49.000	94.000	615.00	0.0000	2478.0	0.0193	ACC	Y	N

199	49.000	94.000	423.00	19.000	2478.0	0.0159	ACC	Y	N
200	49.000	94.000	144.00	40.000	2478.0	0.0110	ACC	Y	N
201	49.000	94.000	68.000	181.00	2478.0	0.0110	ACC	Y	N
202	49.000	94.000	6.0000	421.00	2478.0	0.0116	ACC	Y	N
203	49.000	94.000	0.0000	378.00	2478.0	0.0112	ACC	Y	N
204	49.000	94.000	29.000	85.000	2478.0	0.0095	ACC	Y	N
205	50.000	94.000	36.000	142.00	4539.0	0.0072	ACC	Y	N
206	50.000	94.000	431.00	0.0000	4539.0	0.0096	ACC	Y	N
207	50.000	94.000	619.00	0.0000	4539.0	0.0119	ACC	Y	N
208	50.000	94.000	543.00	0.0000	4539.0	0.0117	ACC	Y	N
209	50.000	94.000	461.00	0.0000	4539.0	0.0103	ACC	Y	N
210	50.000	94.000	93.000	30.000	4539.0	0.0073	ACC	Y	N
211	50.000	94.000	50.000	156.00	4539.0	0.0078	ACC	Y	N
212	50.000	94.000	50.000	156.00	4539.0	0.0064	ACC	Y	N
213	50.000	94.000	0.0000	819.00	4539.0	0.0085	ACC	Y	N
214	50.000	94.000	0.0000	930.00	4539.0	0.0096	ACC	Y	N
215	50.000	94.000	0.0000	882.00	4539.0	0.0085	ACC	Y	N
216	50.000	94.000	0.0000	553.00	4539.0	0.0105	ACC	Y	N
217	51.000	94.000	426.00	18.000	5779.0	0.0173	ACC	Y	N
218	51.000	94.000	859.00	0.0000	5779.0	0.0231	ACC	Y	N
219	51.000	94.000	1060.0	0.0000	5779.0	0.0294	ACC	Y	N
220	51.000	94.000	1398.0	0.0000	5779.0	0.0305	ACC	Y	N
221	51.000	94.000	1155.0	0.0000	5779.0	0.0302	ACC	Y	N
222	51.000	94.000	659.00	0.0000	5779.0	0.0236	ACC	Y	N
223	51.000	94.000	400.00	35.000	5779.0	0.0181	ACC	Y	N
224	51.000	94.000	94.000	117.00	5779.0	0.0155	ACC	Y	N
225	51.000	94.000	10.000	283.00	5779.0	0.0117	ACC	Y	N
226	51.000	94.000	0.0000	0.0000	5779.0	0.0515	ACC	Y	N
227	51.000	94.000	0.0000	0.0000	5779.0	0.0155	ACC	Y	N
228	51.000	94.000	0.0000	0.0000	5779.0	0.0155	ACC	Y	N
229	52.000	94.000	159.00	43.000	1812.0	0.0084	ACC	Y	N
230	52.000	94.000	374.00	17.000	1812.0	0.0059	ACC	Y	N
231	52.000	94.000	708.00	0.0000	1812.0	0.0125	ACC	Y	N
232	52.000	94.000	786.00	0.0000	1812.0	0.0114	ACC	Y	N
233	52.000	94.000	526.00	4.0000	1812.0	0.0098	ACC	Y	N
234	52.000	94.000	294.00	16.000	1812.0	0.0114	ACC	Y	N
235	52.000	94.000	61.000	125.00	1812.0	0.0054	ACC	Y	N
236	52.000	94.000	64.000	145.00	1812.0	0.0059	ACC	Y	N
237	52.000	94.000	0.0000	414.00	1812.0	0.0060	ACC	Y	N
238	52.000	94.000	0.0000	465.00	1812.0	0.0079	ACC	Y	N
239	52.000	94.000	0.0000	0.0000	1812.0	0.0099	ACC	Y	N
240	52.000	94.000	0.0000	0.0000	1812.0	0.0118	ACC	Y	N
241	53.000	94.000	126.00	51.000	2708.0	0.0113	ACC	Y	N
242	53.000	94.000	261.00	54.000	2708.0	0.0064	ACC	Y	N
243	53.000	94.000	432.00	4.0000	2708.0	0.0181	ACC	Y	N
244	53.000	94.000	751.00	0.0000	2708.0	0.0206	ACC	Y	N
245	53.000	94.000	513.00	6.0000	2708.0	0.0160	ACC	Y	N
246	53.000	94.000	322.00	17.000	2708.0	0.0154	ACC	Y	N
247	53.000	94.000	88.000	91.000	2708.0	0.0112	ACC	Y	N
248	53.000	94.000	77.000	113.00	2708.0	0.0093	ACC	Y	N
249	53.000	94.000	0.0000	424.00	2708.0	0.0090	ACC	Y	N
250	53.000	94.000	0.0000	498.00	2708.0	0.0111	ACC	Y	N
251	53.000	94.000	0.0000	378.00	2708.0	0.0097	ACC	Y	N
252	53.000	94.000	0.0000	498.00	2708.0	0.0088	ACC	Y	N
253	54.000	94.000	113.00	67.000	2910.0	0.0080	ACC	Y	N
254	54.000	94.000	301.00	24.000	2910.0	0.0087	ACC	Y	N
255	54.000	94.000	643.00	0.0000	2910.0	0.0125	ACC	Y	N
256	54.000	94.000	730.00	0.0000	2910.0	0.0141	ACC	Y	N
257	54.000	94.000	441.00	7.0000	2910.0	0.0095	ACC	Y	N
258	54.000	94.000	228.00	25.000	2910.0	0.0100	ACC	Y	N
259	54.000	94.000	68.000	90.000	2910.0	0.0061	ACC	Y	N
260	54.000	94.000	45.000	152.00	2910.0	0.0067	ACC	Y	N
261	54.000	94.000	0.0000	430.00	2910.0	0.0083	ACC	Y	N
262	54.000	94.000	0.0000	471.00	2910.0	0.0088	ACC	Y	N
263	54.000	94.000	0.0000	368.00	2910.0	0.0085	ACC	Y	N
264	54.000	94.000	2.0000	203.00	2910.0	0.0082	ACC	Y	N
265	55.000	94.000	391.00	10.000	2878.0	0.0132	ACC	Y	N
266	55.000	94.000	709.00	0.0000	2878.0	0.0129	ACC	Y	N
267	55.000	94.000	901.00	0.0000	2878.0	0.0208	ACC	Y	N
268	55.000	94.000	1183.0	0.0000	2878.0	0.0241	ACC	Y	N
269	55.000	94.000	918.00	0.0000	2878.0	0.0199	ACC	Y	N

270	55.000	94.000	575.00	0.0000	2878.0	0.0170	ACC	Y N
271	55.000	94.000	314.00	26.000	2878.0	0.0148	ACC	Y N
272	55.000	94.000	92.000	79.000	2878.0	0.0117	ACC	Y N
273	55.000	94.000	4.0000	352.00	2878.0	0.0133	ACC	Y N
274	55.000	94.000	0.0000	374.00	2878.0	0.0129	ACC	Y N
275	55.000	94.000	2.0000	313.00	2878.0	0.0129	ACC	Y N
276	55.000	94.000	72.000	146.00	2878.0	0.0156	ACC	Y N
277	33.000	93.000	53.000	65.000	3970.0	0.0074	ACC	Y N
278	33.000	93.000	411.00	1.0000	3970.0	0.0099	ACC	Y N
279	33.000	93.000	491.00	1.0000	3970.0	0.0117	ACC	Y N
280	33.000	93.000	576.00	0.0000	3970.0	0.0120	ACC	Y N
281	33.000	93.000	447.00	3.0000	3970.0	0.0109	ACC	Y N
282	33.000	93.000	318.00	7.0000	3970.0	0.0100	ACC	Y N
283	33.000	93.000	158.00	34.000	3970.0	0.0082	ACC	Y N
284	33.000	93.000	11.000	161.00	3970.0	0.0069	ACC	Y N
285	33.000	93.000	0.0000	433.00	3970.0	0.0080	ACC	Y N
286	33.000	93.000	0.0000	552.00	3970.0	0.0083	ACC	Y N
287	33.000	93.000	0.0000	552.00	3970.0	0.0086	ACC	Y N
288	33.000	93.000	11.000	312.00	3970.0	0.0065	ACC	Y N
289	34.000	93.000	23.000	117.00	2655.0	0.0071	ACC	Y N
290	34.000	93.000	338.00	0.0000	2655.0	0.0081	ACC	Y N
291	34.000	93.000	610.00	0.0000	2655.0	0.0117	ACC	Y N
292	34.000	93.000	596.00	0.0000	2655.0	0.0167	ACC	Y N
293	34.000	93.000	406.00	0.0000	2655.0	0.0146	ACC	Y N
294	34.000	93.000	176.00	2.0000	2655.0	0.0103	ACC	Y N
295	34.000	93.000	164.00	15.000	2655.0	0.0079	ACC	Y N
296	34.000	93.000	25.000	100.00	2655.0	0.0073	ACC	Y N
297	34.000	93.000	18.000	306.00	2655.0	0.0070	ACC	Y N
298	34.000	93.000	0.0000	437.00	2655.0	0.0074	ACC	Y N
299	34.000	93.000	0.0000	395.00	2655.0	0.0080	ACC	Y N
300	34.000	93.000	0.0000	0.0000	2655.0	0.0109	ACC	Y N
301	35.000	93.000	155.00	23.000	2295.0	0.0081	ACC	Y N
302	35.000	93.000	666.00	0.0000	2295.0	0.0151	ACC	Y N
303	35.000	93.000	837.00	0.0000	2295.0	0.0262	ACC	Y N
304	35.000	93.000	813.00	0.0000	2295.0	0.0283	ACC	Y N
305	35.000	93.000	698.00	0.0000	2295.0	0.0235	ACC	Y N
306	35.000	93.000	499.00	0.0000	2295.0	0.0189	ACC	Y N
307	35.000	93.000	113.00	6.0000	2295.0	0.0125	ACC	Y N
308	35.000	93.000	45.000	104.00	2295.0	0.0085	ACC	Y N
309	35.000	93.000	0.0000	276.00	2295.0	0.0098	ACC	Y N
310	35.000	93.000	0.0000	412.00	2295.0	0.0095	ACC	Y N
311	35.000	93.000	0.0000	311.00	2295.0	0.0093	ACC	Y N
312	35.000	93.000	26.000	127.00	2295.0	0.0093	ACC	Y N
313	36.000	93.000	0.0000	0.0000	2779.0	0.0071	ACC	Y N
314	36.000	93.000	0.0000	0.0000	2779.0	0.0074	ACC	Y N
315	36.000	93.000	0.0000	0.0000	2779.0	0.0122	ACC	Y N
316	36.000	93.000	0.0000	0.0000	2779.0	0.0144	ACC	Y N
317	36.000	93.000	0.0000	0.0000	2779.0	0.0117	ACC	Y N
318	36.000	93.000	0.0000	0.0000	2779.0	0.0104	ACC	Y N
319	36.000	93.000	0.0000	0.0000	2779.0	0.0088	ACC	Y N
320	36.000	93.000	0.0000	0.0000	2779.0	0.0079	ACC	Y N
321	36.000	93.000	0.0000	0.0000	2779.0	0.0092	ACC	Y N
322	36.000	93.000	0.0000	0.0000	2779.0	0.0077	ACC	Y N
323	36.000	93.000	0.0000	0.0000	2779.0	0.0078	ACC	Y N
324	36.000	93.000	0.0000	0.0000	2779.0	0.0073	ACC	Y N
325	37.000	93.000	0.0000	266.00	3767.0	0.0063	ACC	Y N
326	37.000	93.000	270.00	6.0000	3767.0	0.0067	ACC	Y N
327	37.000	93.000	421.00	0.0000	3767.0	0.0104	ACC	Y N
328	37.000	93.000	318.00	0.0000	3767.0	0.0107	ACC	Y N
329	37.000	93.000	313.00	0.0000	3767.0	0.0079	ACC	Y N
330	37.000	93.000	164.00	8.0000	3767.0	0.0092	ACC	Y N
331	37.000	93.000	45.000	111.00	3767.0	0.0073	ACC	Y N
332	37.000	93.000	0.0000	382.00	3767.0	0.0077	ACC	Y N
333	37.000	93.000	0.0000	578.00	3767.0	0.0081	ACC	Y N
334	37.000	93.000	0.0000	684.00	3767.0	0.0092	ACC	Y N
335	37.000	93.000	0.0000	625.00	3767.0	0.0063	ACC	Y N
336	37.000	93.000	0.0000	474.00	3767.0	0.0067	ACC	Y N
337	38.000	93.000	0.0000	0.0000	3028.0	0.0064	ACC	Y N
338	38.000	93.000	0.0000	0.0000	3028.0	0.0092	ACC	Y N
339	38.000	93.000	0.0000	0.0000	3028.0	0.0171	ACC	Y N
340	38.000	93.000	0.0000	0.0000	3028.0	0.0160	ACC	Y N

341	38.000	93.000	0.0000	0.0000	3028.0	0.0149	ACC	Y	N
342	38.000	93.000	0.0000	0.0000	3028.0	0.0134	ACC	Y	N
343	38.000	93.000	0.0000	0.0000	3028.0	0.0094	ACC	Y	N
344	38.000	93.000	0.0000	0.0000	3028.0	0.0068	ACC	Y	N
345	38.000	93.000	0.0000	0.0000	3028.0	0.0074	ACC	Y	N
346	38.000	93.000	0.0000	0.0000	3028.0	0.0082	ACC	Y	N
347	38.000	93.000	0.0000	0.0000	3028.0	0.0078	ACC	Y	N
348	38.000	93.000	0.0000	0.0000	3028.0	0.0071	ACC	Y	N
349	39.000	93.000	493.00	11.000	4917.0	0.0135	ACC	Y	N
350	39.000	93.000	973.00	0.0000	4917.0	0.0155	ACC	Y	N
351	39.000	93.000	1418.0	0.0000	4917.0	0.0179	ACC	Y	N
352	39.000	93.000	1515.0	0.0000	4917.0	0.0263	ACC	Y	N
353	39.000	93.000	1390.0	0.0000	4917.0	0.0241	ACC	Y	N
354	39.000	93.000	842.00	0.0000	4917.0	0.0209	ACC	Y	N
355	39.000	93.000	666.00	0.0000	4917.0	0.0169	ACC	Y	N
356	39.000	93.000	264.00	3.0000	4917.0	0.0094	ACC	Y	N
357	39.000	93.000	171.00	34.000	4917.0	0.0069	ACC	Y	N
358	39.000	93.000	66.000	56.000	4917.0	0.0069	ACC	Y	N
359	39.000	93.000	146.00	26.000	4917.0	0.0069	ACC	Y	N
360	39.000	93.000	281.00	9.0000	4917.0	0.0090	ACC	Y	N
361	40.000	93.000	624.00	0.0000	4963.0	0.0215	ACC	Y	N
362	40.000	93.000	797.00	0.0000	4963.0	0.0235	ACC	Y	N
363	40.000	93.000	1123.0	0.0000	4963.0	0.0262	ACC	Y	N
364	40.000	93.000	1248.0	0.0000	4963.0	0.0283	ACC	Y	N
365	40.000	93.000	1439.0	0.0000	4963.0	0.0283	ACC	Y	N
366	40.000	93.000	1099.0	0.0000	4963.0	0.0276	ACC	Y	N
367	40.000	93.000	551.00	0.0000	4963.0	0.0224	ACC	Y	N
368	40.000	93.000	279.00	4.0000	4963.0	0.0096	ACC	Y	N
369	40.000	93.000	128.00	33.000	4963.0	0.0038	ACC	Y	N
370	40.000	93.000	7.0000	222.00	4963.0	0.0053	ACC	Y	N
371	40.000	93.000	17.000	170.00	4963.0	0.0064	ACC	Y	N
372	40.000	93.000	212.00	42.000	4963.0	0.0105	ACC	Y	N
373	41.000	93.000	111.00	17.000	4479.0	0.0050	ACC	Y	N
374	41.000	93.000	719.00	0.0000	4479.0	0.0102	ACC	Y	N
375	41.000	93.000	670.00	0.0000	4479.0	0.0173	ACC	Y	N
376	41.000	93.000	670.00	0.0000	4479.0	0.0136	ACC	Y	N
377	41.000	93.000	497.00	0.0000	4479.0	0.0137	ACC	Y	N
378	41.000	93.000	497.00	0.0000	4479.0	0.0127	ACC	Y	N
379	41.000	93.000	0.0000	0.0000	4479.0	0.0077	ACC	Y	N
380	41.000	93.000	0.0000	0.0000	4479.0	0.0055	ACC	Y	N
381	41.000	93.000	0.0000	399.00	4479.0	0.0060	ACC	Y	N
382	41.000	93.000	0.0000	515.00	4479.0	0.0058	ACC	Y	N
383	41.000	93.000	0.0000	392.00	4479.0	0.0065	ACC	Y	N
384	41.000	93.000	5.0000	174.00	4479.0	0.0064	ACC	Y	N
385	42.000	93.000	641.00	0.0000	2628.0	0.0189	ACC	Y	N
386	42.000	93.000	1029.0	0.0000	2628.0	0.0214	ACC	Y	N
387	42.000	93.000	1308.0	0.0000	2628.0	0.0240	ACC	Y	N
388	42.000	93.000	1425.0	0.0000	2628.0	0.0317	ACC	Y	N
389	42.000	93.000	1351.0	0.0000	2628.0	0.0275	ACC	Y	N
390	42.000	93.000	1103.0	0.0000	2628.0	0.0230	ACC	Y	N
391	42.000	93.000	817.00	0.0000	2628.0	0.0246	ACC	Y	N
392	42.000	93.000	396.00	0.0000	2628.0	0.0146	ACC	Y	N
393	42.000	93.000	338.00	0.0000	2628.0	0.0116	ACC	Y	N
394	42.000	93.000	13.000	0.0000	2628.0	0.0109	ACC	Y	N
395	42.000	93.000	33.000	0.0000	2628.0	0.0098	ACC	Y	N
396	42.000	93.000	0.0000	0.0000	2628.0	0.0129	ACC	Y	N
397	43.000	93.000	238.00	15.000	4170.0	0.0085	ACC	Y	N
398	43.000	93.000	394.00	7.0000	4170.0	0.0116	ACC	Y	N
399	43.000	93.000	676.00	0.0000	4170.0	0.0181	ACC	Y	N
400	43.000	93.000	761.00	0.0000	4170.0	0.0173	ACC	Y	N
401	43.000	93.000	723.00	0.0000	4170.0	0.0191	ACC	Y	N
402	43.000	93.000	583.00	0.0000	4170.0	0.0209	ACC	Y	N
403	43.000	93.000	262.00	25.000	4170.0	0.0151	ACC	Y	N
404	43.000	93.000	143.00	19.000	4170.0	0.0089	ACC	Y	N
405	43.000	93.000	6.0000	339.00	4170.0	0.0107	ACC	Y	N
406	43.000	93.000	0.0000	571.00	4170.0	0.0102	ACC	Y	N
407	43.000	93.000	0.0000	432.00	4170.0	0.0100	ACC	Y	N
408	43.000	93.000	15.000	280.00	4170.0	0.0094	ACC	Y	N
409	44.000	93.000	96.000	49.000	3121.0	0.0071	ACC	Y	N
410	44.000	93.000	469.00	0.0000	3121.0	0.0137	ACC	Y	N
411	44.000	93.000	669.00	0.0000	3121.0	0.0165	ACC	Y	N

412	44.000	93.000	753.00	0.0000	3121.0	0.0195	ACC	Y	N
413	44.000	93.000	598.00	0.0000	3121.0	0.0153	ACC	Y	N
414	44.000	93.000	439.00	3.0000	3121.0	0.0150	ACC	Y	N
415	44.000	93.000	227.00	25.000	3121.0	0.0105	ACC	Y	N
416	44.000	93.000	35.000	129.00	3121.0	0.0089	ACC	Y	N
417	44.000	93.000	1.0000	41.000	3121.0	0.0086	ACC	Y	N
418	44.000	93.000	0.0000	662.00	3121.0	0.0098	ACC	Y	N
419	44.000	93.000	0.0000	553.00	3121.0	0.0094	ACC	Y	N
420	44.000	93.000	19.000	248.00	3121.0	0.0084	ACC	Y	N
421	45.000	93.000	750.00	0.0000	3750.0	0.0195	ACC	Y	N
422	45.000	93.000	1080.0	0.0000	3750.0	0.0240	ACC	Y	N
423	45.000	93.000	1412.0	0.0000	3750.0	0.0306	ACC	Y	N
424	45.000	93.000	1741.0	0.0000	3750.0	0.0355	ACC	Y	N
425	45.000	93.000	1687.0	0.0000	3750.0	0.0326	ACC	Y	N
426	45.000	93.000	1687.0	0.0000	3750.0	0.0296	ACC	Y	N
427	45.000	93.000	776.00	0.0000	3750.0	0.0233	ACC	Y	N
428	45.000	93.000	440.00	0.0000	3750.0	0.0154	ACC	Y	N
429	45.000	93.000	188.00	36.000	3750.0	0.0082	ACC	Y	N
430	45.000	93.000	74.000	74.000	3750.0	0.0029	ACC	Y	N
431	45.000	93.000	52.000	82.000	3750.0	0.0044	ACC	Y	N
432	45.000	93.000	320.00	6.0000	3750.0	0.0091	ACC	Y	N
433	46.000	93.000	0.0000	282.00	3831.0	0.0101	ACC	Y	N
434	46.000	93.000	53.000	229.00	3831.0	0.0090	ACC	Y	N
435	46.000	93.000	60.000	85.000	3831.0	0.0093	ACC	Y	N
436	46.000	93.000	46.000	125.00	3831.0	0.0080	ACC	Y	N
437	46.000	93.000	111.00	19.000	3831.0	0.0070	ACC	Y	N
438	46.000	93.000	70.000	77.000	3831.0	0.0068	ACC	Y	N
439	46.000	93.000	14.000	137.00	3831.0	0.0078	ACC	Y	N
440	46.000	93.000	0.0000	401.00	3831.0	0.0078	ACC	Y	N
441	46.000	93.000	0.0000	546.00	3831.0	0.0094	ACC	Y	N
442	46.000	93.000	0.0000	597.00	3831.0	0.0088	ACC	Y	N
443	46.000	93.000	0.0000	616.00	3831.0	0.0088	ACC	Y	N
444	46.000	93.000	0.0000	515.00	3831.0	0.0091	ACC	Y	N
445	47.000	93.000	438.00	6.0000	3345.0	0.0194	ACC	Y	N
446	47.000	93.000	938.00	0.0000	3345.0	0.0244	ACC	Y	N
447	47.000	93.000	1365.0	0.0000	3345.0	0.0324	ACC	Y	N
448	47.000	93.000	2047.0	0.0000	3345.0	0.0331	ACC	Y	N
449	47.000	93.000	1498.0	0.0000	3345.0	0.0281	ACC	Y	N
450	47.000	93.000	792.00	0.0000	3345.0	0.0264	ACC	Y	N
451	47.000	93.000	792.00	0.0000	3345.0	0.0216	ACC	Y	N
452	47.000	93.000	370.00	46.000	3345.0	0.0138	ACC	Y	N
453	47.000	93.000	319.00	46.000	3345.0	0.0120	ACC	Y	N
454	47.000	93.000	103.00	29.000	3345.0	0.0112	ACC	Y	N
455	47.000	93.000	85.000	67.000	3345.0	0.0117	ACC	Y	N
456	47.000	93.000	375.00	10.000	3345.0	0.0127	ACC	Y	N
457	48.000	93.000	20.000	96.000	1826.0	0.0067	ACC	Y	N
458	48.000	93.000	174.00	104.00	1826.0	0.0070	ACC	Y	N
459	48.000	93.000	268.00	21.000	1826.0	0.0102	ACC	Y	N
460	48.000	93.000	186.00	33.000	1826.0	0.0100	ACC	Y	N
461	48.000	93.000	286.00	1.0000	1826.0	0.0085	ACC	Y	N
462	48.000	93.000	178.00	47.000	1826.0	0.0086	ACC	Y	N
463	48.000	93.000	55.000	63.000	1826.0	0.0066	ACC	Y	N
464	48.000	93.000	0.0000	346.00	1826.0	0.0073	ACC	Y	N
465	48.000	93.000	0.0000	526.00	1826.0	0.0082	ACC	Y	N
466	48.000	93.000	0.0000	624.00	1826.0	0.0089	ACC	Y	N
467	48.000	93.000	0.0000	577.00	1826.0	0.0085	ACC	Y	N
468	48.000	93.000	0.0000	487.00	1826.0	0.0082	ACC	Y	N
469	49.000	93.000	355.00	6.0000	2462.0	0.0140	ACC	Y	N
470	49.000	93.000	938.00	0.0000	2462.0	0.0220	ACC	Y	N
471	49.000	93.000	1154.0	0.0000	2462.0	0.0252	ACC	Y	N
472	49.000	93.000	1268.0	0.0000	2462.0	0.0216	ACC	Y	N
473	49.000	93.000	1010.0	0.0000	2462.0	0.0219	ACC	Y	N
474	49.000	93.000	717.00	0.0000	2462.0	0.0216	ACC	Y	N
475	49.000	93.000	531.00	0.0000	2462.0	0.0169	ACC	Y	N
476	49.000	93.000	145.00	74.000	2462.0	0.0146	ACC	Y	N
477	49.000	93.000	155.00	64.000	2462.0	0.0155	ACC	Y	N
478	49.000	93.000	41.000	68.000	2462.0	0.0099	ACC	Y	N
479	49.000	93.000	46.000	174.00	2462.0	0.0110	ACC	Y	N
480	49.000	93.000	130.00	74.000	2462.0	0.0111	ACC	Y	N
481	50.000	93.000	0.0000	0.0000	4612.0	0.0070	ACC	Y	N
482	50.000	93.000	0.0000	0.0000	4612.0	0.0089	ACC	Y	N

483	50.000	93.000	0.0000	0.0000	4612.0	0.0104	ACC	Y	N
484	50.000	93.000	0.0000	0.0000	4612.0	0.0118	ACC	Y	N
485	50.000	93.000	0.0000	0.0000	4612.0	0.0098	ACC	Y	N
486	50.000	93.000	0.0000	0.0000	4612.0	0.0069	ACC	Y	N
487	50.000	93.000	0.0000	0.0000	4612.0	0.0062	ACC	Y	N
488	50.000	93.000	0.0000	0.0000	4612.0	0.0060	ACC	Y	N
489	50.000	93.000	0.0000	0.0000	4612.0	0.0069	ACC	Y	N
490	50.000	93.000	0.0000	808.00	4612.0	0.0076	ACC	Y	N
491	50.000	93.000	0.0000	767.00	4612.0	0.0085	ACC	Y	N
492	50.000	93.000	0.0000	0.0000	4612.0	0.0071	ACC	Y	N
493	51.000	93.000	342.00	18.000	6015.0	0.0159	ACC	Y	N
494	51.000	93.000	874.00	0.0000	6015.0	0.0198	ACC	Y	N
495	51.000	93.000	1131.0	0.0000	6015.0	0.0232	ACC	Y	N
496	51.000	93.000	1376.0	0.0000	6015.0	0.0260	ACC	Y	N
497	51.000	93.000	1191.0	0.0000	6015.0	0.0229	ACC	Y	N
498	51.000	93.000	894.00	0.0000	6015.0	0.0221	ACC	Y	N
499	51.000	93.000	510.00	0.0000	6015.0	0.0174	ACC	Y	N
500	51.000	93.000	143.00	24.000	6015.0	0.0139	ACC	Y	N
501	51.000	93.000	33.000	191.00	6015.0	0.0145	ACC	Y	N
502	51.000	93.000	0.0000	319.00	6015.0	0.0155	ACC	Y	N
503	51.000	93.000	2.0000	320.00	6015.0	0.0157	ACC	Y	N
504	51.000	93.000	28.000	160.00	6015.0	0.0140	ACC	Y	N
505	52.000	93.000	180.00	26.000	1758.0	0.0067	ACC	Y	N
506	52.000	93.000	354.00	25.000	1758.0	0.0117	ACC	Y	N
507	52.000	93.000	604.00	0.0000	1758.0	0.0197	ACC	Y	N
508	52.000	93.000	586.00	2.0000	1758.0	0.0188	ACC	Y	N
509	52.000	93.000	626.00	0.0000	1758.0	0.0169	ACC	Y	N
510	52.000	93.000	446.00	0.0000	1758.0	0.0147	ACC	Y	N
511	52.000	93.000	190.00	27.000	1758.0	0.0128	ACC	Y	N
512	52.000	93.000	10.000	229.00	1758.0	0.0215	ACC	Y	N
513	52.000	93.000	0.0000	439.00	1758.0	0.0406	ACC	Y	N
514	52.000	93.000	0.0000	586.00	1758.0	0.0097	ACC	Y	N
515	52.000	93.000	0.0000	446.00	1758.0	0.0084	ACC	Y	N
516	52.000	93.000	14.000	318.00	1758.0	0.0100	ACC	Y	N
517	53.000	93.000	177.00	33.000	2684.0	0.0131	ACC	Y	N
518	53.000	93.000	313.00	22.000	2684.0	0.0157	ACC	Y	N
519	53.000	93.000	592.00	0.0000	2684.0	0.0188	ACC	Y	N
520	53.000	93.000	574.00	0.0000	2684.0	0.0209	ACC	Y	N
521	53.000	93.000	641.00	0.0000	2684.0	0.0182	ACC	Y	N
522	53.000	93.000	442.00	0.0000	2684.0	0.0183	ACC	Y	N
523	53.000	93.000	140.00	41.000	2684.0	0.0129	ACC	Y	N
524	53.000	93.000	2.0000	331.00	2684.0	0.0096	ACC	Y	N
525	53.000	93.000	0.0000	414.00	2684.0	0.0092	ACC	Y	N
526	53.000	93.000	0.0000	611.00	2684.0	0.0096	ACC	Y	N
527	53.000	93.000	0.0000	451.00	2684.0	0.0103	ACC	Y	N
528	53.000	93.000	12.000	305.00	2684.0	0.0085	ACC	Y	N
529	54.000	93.000	136.00	30.000	2910.0	0.0074	ACC	Y	N
530	54.000	93.000	0.0000	0.0000	2910.0	0.0092	ACC	Y	N
531	54.000	93.000	580.00	0.0000	2910.0	0.0123	ACC	Y	N
532	54.000	93.000	507.00	3.0000	2910.0	0.0138	ACC	Y	N
533	54.000	93.000	0.0000	0.0000	2910.0	0.0125	ACC	Y	N
534	54.000	93.000	405.00	0.0000	2910.0	0.0138	ACC	Y	N
535	54.000	93.000	185.00	23.000	2910.0	0.0093	ACC	Y	N
536	54.000	93.000	9.0000	196.00	2910.0	0.0075	ACC	Y	N
537	54.000	93.000	0.0000	383.00	2910.0	0.0082	ACC	Y	N
538	54.000	93.000	0.0000	622.00	2910.0	0.0093	ACC	Y	N
539	54.000	93.000	0.0000	515.00	2910.0	0.0090	ACC	Y	N
540	54.000	93.000	9.0000	350.00	2910.0	0.0092	ACC	Y	N
541	55.000	93.000	255.00	30.000	2786.0	0.0115	ACC	Y	N
542	55.000	93.000	9.0000	172.00	2786.0	0.0162	ACC	Y	N
543	55.000	93.000	921.00	0.0000	2786.0	0.0177	ACC	Y	N
544	55.000	93.000	1091.0	0.0000	2786.0	0.0214	ACC	Y	N
545	55.000	93.000	972.00	0.0000	2786.0	0.0129	ACC	Y	N
546	55.000	93.000	753.00	0.0000	2786.0	0.0132	ACC	Y	N
547	55.000	93.000	402.00	0.0000	2786.0	0.0166	ACC	Y	N
548	55.000	93.000	82.000	56.000	2786.0	0.0114	ACC	Y	N
549	55.000	93.000	22.000	278.00	2786.0	0.0107	ACC	Y	N
550	55.000	93.000	0.0000	430.00	2786.0	0.0110	ACC	Y	N
551	55.000	93.000	3.0000	430.00	2786.0	0.0123	ACC	Y	N
552	55.000	93.000	110.00	76.000	2786.0	0.0131	ACC	Y	N
553	33.000	92.000	57.000	126.00	4163.0	0.0085	ACC	Y	N

554	33.000	92.000	0.0000	0.0000	4163.0	0.0079	ACC	Y	N
555	33.000	92.000	433.00	0.0000	4163.0	0.0109	ACC	Y	N
556	33.000	92.000	0.0000	0.0000	4163.0	0.0121	ACC	Y	N
557	33.000	92.000	0.0000	0.0000	4163.0	0.0098	ACC	Y	N
558	33.000	92.000	0.0000	0.0000	4163.0	0.0079	ACC	Y	N
559	33.000	92.000	97.000	66.000	4163.0	0.0062	ACC	Y	N
560	33.000	92.000	24.000	189.00	4163.0	0.0064	ACC	Y	N
561	33.000	92.000	0.0000	378.00	4163.0	0.0067	ACC	Y	N
562	33.000	92.000	0.0000	521.00	4163.0	0.0073	ACC	Y	N
563	33.000	92.000	0.0000	384.00	4163.0	0.0081	ACC	Y	N
564	33.000	92.000	11.000	281.00	4163.0	0.0057	ACC	Y	N
565	34.000	92.000	79.000	255.00	2655.0	0.0059	ACC	Y	N
566	34.000	92.000	0.0000	0.0000	2655.0	0.0072	ACC	Y	N
567	34.000	92.000	583.00	0.0000	2655.0	0.0110	ACC	Y	N
568	34.000	92.000	0.0000	0.0000	2655.0	0.0108	ACC	Y	N
569	34.000	92.000	0.0000	0.0000	2655.0	0.0063	ACC	Y	N
570	34.000	92.000	0.0000	0.0000	2655.0	0.0085	ACC	Y	N
571	34.000	92.000	73.000	38.000	2655.0	0.0076	ACC	Y	N
572	34.000	92.000	0.0000	297.00	2655.0	0.0061	ACC	Y	N
573	34.000	92.000	2.0000	309.00	2655.0	0.0065	ACC	Y	N
574	34.000	92.000	0.0000	433.00	2655.0	0.0079	ACC	Y	N
575	34.000	92.000	0.0000	491.00	2655.0	0.0057	ACC	Y	N
576	34.000	92.000	0.0000	306.00	2655.0	0.0082	ACC	Y	N
577	35.000	92.000	269.00	17.000	2129.0	0.0071	ACC	Y	N
578	35.000	92.000	707.00	0.0000	2129.0	0.0083	ACC	Y	N
579	35.000	92.000	765.00	0.0000	2129.0	0.0093	ACC	Y	N
580	35.000	92.000	898.00	0.0000	2129.0	0.0126	ACC	Y	N
581	35.000	92.000	561.00	0.0000	2129.0	0.0191	ACC	Y	N
582	35.000	92.000	441.00	0.0000	2129.0	0.0139	ACC	Y	N
583	35.000	92.000	149.00	17.000	2129.0	0.0159	ACC	Y	N
584	35.000	92.000	99.000	33.000	2129.0	0.0119	ACC	Y	N
585	35.000	92.000	10.000	219.00	2129.0	0.0078	ACC	Y	N
586	35.000	92.000	0.0000	352.00	2129.0	0.0089	ACC	Y	N
587	35.000	92.000	0.0000	16.000	2129.0	0.0096	ACC	Y	N
588	35.000	92.000	8.0000	20.000	2129.0	0.0078	ACC	Y	N
589	36.000	92.000	98.000	190.00	2779.0	0.0073	ACC	Y	N
590	36.000	92.000	0.0000	0.0000	2779.0	0.0089	ACC	Y	N
591	36.000	92.000	545.00	0.0000	2779.0	0.0132	ACC	Y	N
592	36.000	92.000	0.0000	0.0000	2779.0	0.0144	ACC	Y	N
593	36.000	92.000	0.0000	0.0000	2779.0	0.0136	ACC	Y	N
594	36.000	92.000	0.0000	0.0000	2779.0	0.0101	ACC	Y	N
595	36.000	92.000	24.000	92.000	2779.0	0.0086	ACC	Y	N
596	36.000	92.000	0.0000	374.00	2779.0	0.0077	ACC	Y	N
597	36.000	92.000	3.0000	268.00	2779.0	0.0074	ACC	Y	N
598	36.000	92.000	0.0000	411.00	2779.0	0.0081	ACC	Y	N
599	36.000	92.000	0.0000	467.00	2779.0	0.0082	ACC	Y	N
600	36.000	92.000	0.0000	265.00	2779.0	0.0076	ACC	Y	N
601	37.000	92.000	44.000	314.00	3900.0	0.0061	ACC	Y	N
602	37.000	92.000	190.00	28.000	3900.0	0.0073	ACC	Y	N
603	37.000	92.000	349.00	0.0000	3900.0	0.0097	ACC	Y	N
604	37.000	92.000	414.00	0.0000	3900.0	0.0095	ACC	Y	N
605	37.000	92.000	240.00	0.0000	3900.0	0.0087	ACC	Y	N
606	37.000	92.000	197.00	2.0000	3900.0	0.0070	ACC	Y	N
607	37.000	92.000	35.000	171.00	3900.0	0.0066	ACC	Y	N
608	37.000	92.000	1.0000	338.00	3900.0	0.0064	ACC	Y	N
609	37.000	92.000	0.0000	566.00	3900.0	0.0067	ACC	Y	N
610	37.000	92.000	0.0000	646.00	3900.0	0.0068	ACC	Y	N
611	37.000	92.000	0.0000	592.00	3900.0	0.0080	ACC	Y	N
612	37.000	92.000	0.0000	529.00	3900.0	0.0067	ACC	Y	N
613	38.000	92.000	128.00	123.00	2991.0	0.0085	ACC	Y	N
614	38.000	92.000	551.00	1.0000	2991.0	0.0145	ACC	Y	N
615	38.000	92.000	623.00	1.0000	2991.0	0.0156	ACC	Y	N
616	38.000	92.000	712.00	1.0000	2991.0	0.0189	ACC	Y	N
617	38.000	92.000	574.00	1.0000	2991.0	0.0172	ACC	Y	N
618	38.000	92.000	278.00	9.0000	2991.0	0.0153	ACC	Y	N
619	38.000	92.000	207.00	46.000	2991.0	0.0097	ACC	Y	N
620	38.000	92.000	60.000	116.00	2991.0	0.0089	ACC	Y	N
621	38.000	92.000	67.000	360.00	2991.0	0.0077	ACC	Y	N
622	38.000	92.000	0.0000	430.00	2991.0	0.0087	ACC	Y	N
623	38.000	92.000	1.0000	348.00	2991.0	0.0088	ACC	Y	N
624	38.000	92.000	4.0000	316.00	2991.0	0.0085	ACC	Y	N

625	39.000	92.000	581.00	15.000	4917.0	0.0142	ACC	Y	N
626	39.000	92.000	1045.0	0.0000	4917.0	0.0219	ACC	Y	N
627	39.000	92.000	997.00	0.0000	4917.0	0.0214	ACC	Y	N
628	39.000	92.000	0.0000	0.0000	4917.0	0.0213	ACC	Y	N
629	39.000	92.000	0.0000	0.0000	4917.0	0.0197	ACC	Y	N
630	39.000	92.000	0.0000	0.0000	4917.0	0.0166	ACC	Y	N
631	39.000	92.000	539.00	9.0000	4917.0	0.0148	ACC	Y	N
632	39.000	92.000	262.00	36.000	4917.0	0.0084	ACC	Y	N
633	39.000	92.000	107.00	41.000	4917.0	0.0073	ACC	Y	N
634	39.000	92.000	67.000	51.000	4917.0	0.0073	ACC	Y	N
635	39.000	92.000	0.0000	0.0000	4917.0	0.0063	ACC	Y	N
636	39.000	92.000	138.00	72.000	4917.0	0.0072	ACC	Y	N
637	40.000	92.000	404.00	9.0000	4963.0	0.0195	ACC	Y	N
638	40.000	92.000	0.0000	0.0000	4963.0	0.0241	ACC	Y	N
639	40.000	92.000	1138.0	0.0000	4963.0	0.0287	ACC	Y	N
640	40.000	92.000	0.0000	0.0000	4963.0	0.0310	ACC	Y	N
641	40.000	92.000	0.0000	0.0000	4963.0	0.0261	ACC	Y	N
642	40.000	92.000	0.0000	0.0000	4963.0	0.0305	ACC	Y	N
643	40.000	92.000	653.00	2.0000	4963.0	0.0216	ACC	Y	N
644	40.000	92.000	262.00	8.0000	4963.0	0.0123	ACC	Y	N
645	40.000	92.000	99.000	48.000	4963.0	0.0070	ACC	Y	N
646	40.000	92.000	34.000	67.000	4963.0	0.0060	ACC	Y	N
647	40.000	92.000	54.000	70.000	4963.0	0.0062	ACC	Y	N
648	40.000	92.000	186.00	42.000	4963.0	0.0100	ACC	Y	N
649	41.000	92.000	160.00	10.000	4023.0	0.0047	ACC	Y	N
650	41.000	92.000	251.00	0.0000	4023.0	0.0086	ACC	Y	N
651	41.000	92.000	325.00	0.0000	4023.0	0.0113	ACC	Y	N
652	41.000	92.000	368.00	0.0000	4023.0	0.0148	ACC	Y	N
653	41.000	92.000	257.00	0.0000	4023.0	0.0105	ACC	Y	N
654	41.000	92.000	211.00	0.0000	4023.0	0.0072	ACC	Y	N
655	41.000	92.000	155.00	29.000	4023.0	0.0070	ACC	Y	N
656	41.000	92.000	56.000	51.000	4023.0	0.0065	ACC	Y	N
657	41.000	92.000	1.0000	282.00	4023.0	0.0073	ACC	Y	N
658	41.000	92.000	0.0000	443.00	4023.0	0.0059	ACC	Y	N
659	41.000	92.000	0.0000	0.0000	4023.0	0.0061	ACC	Y	N
660	41.000	92.000	4.0000	238.00	4023.0	0.0067	ACC	Y	N
661	42.000	92.000	712.00	0.0000	2659.0	0.0127	ACC	Y	N
662	42.000	92.000	984.00	0.0000	2659.0	0.0222	ACC	Y	N
663	42.000	92.000	1321.0	0.0000	2659.0	0.0276	ACC	Y	N
664	42.000	92.000	1521.0	0.0000	2659.0	0.0308	ACC	Y	N
665	42.000	92.000	1200.0	0.0000	2659.0	0.0306	ACC	Y	N
666	42.000	92.000	1188.0	0.0000	2659.0	0.0241	ACC	Y	N
667	42.000	92.000	793.00	0.0000	2659.0	0.0222	ACC	Y	N
668	42.000	92.000	322.00	0.0000	2659.0	0.0182	ACC	Y	N
669	42.000	92.000	249.00	43.000	2659.0	0.0114	ACC	Y	N
670	42.000	92.000	117.00	30.000	2659.0	0.0121	ACC	Y	N
671	42.000	92.000	202.00	0.0000	2659.0	0.0144	ACC	Y	N
672	42.000	92.000	261.00	0.0000	2659.0	0.0136	ACC	Y	N
673	43.000	92.000	201.00	34.000	4124.0	0.0074	ACC	Y	N
674	43.000	92.000	427.00	11.000	4124.0	0.0163	ACC	Y	N
675	43.000	92.000	601.00	3.0000	4124.0	0.0113	ACC	Y	N
676	43.000	92.000	731.00	0.0000	4124.0	0.0187	ACC	Y	N
677	43.000	92.000	612.00	0.0000	4124.0	0.0192	ACC	Y	N
678	43.000	92.000	539.00	0.0000	4124.0	0.0174	ACC	Y	N
679	43.000	92.000	287.00	44.000	4124.0	0.0179	ACC	Y	N
680	43.000	92.000	148.00	35.000	4124.0	0.0094	ACC	Y	N
681	43.000	92.000	10.000	181.00	4124.0	0.0095	ACC	Y	N
682	43.000	92.000	0.0000	460.00	4124.0	0.0109	ACC	Y	N
683	43.000	92.000	0.0000	284.00	4124.0	0.0108	ACC	Y	N
684	43.000	92.000	15.000	228.00	4124.0	0.0106	ACC	Y	N
685	44.000	92.000	105.00	82.000	2875.0	0.0086	ACC	Y	N
686	44.000	92.000	502.00	12.000	2875.0	0.0164	ACC	Y	N
687	44.000	92.000	577.00	1.0000	2875.0	0.0185	ACC	Y	N
688	44.000	92.000	693.00	0.0000	2875.0	0.0194	ACC	Y	N
689	44.000	92.000	419.00	0.0000	2875.0	0.0153	ACC	Y	N
690	44.000	92.000	5.0000	328.00	2875.0	0.0133	ACC	Y	N
691	44.000	92.000	137.00	68.000	2875.0	0.0080	ACC	Y	N
692	44.000	92.000	47.000	164.00	2875.0	0.0086	ACC	Y	N
693	44.000	92.000	0.0000	348.00	2875.0	0.0088	ACC	Y	N
694	44.000	92.000	0.0000	523.00	2875.0	0.0108	ACC	Y	N
695	44.000	92.000	0.0000	357.00	2875.0	0.0081	ACC	Y	N

696	44.000	92.000	11.000	248.00	2875.0	0.0110	ACC	Y	N
697	45.000	92.000	639.00	0.0000	3750.0	0.0217	ACC	Y	N
698	45.000	92.000	988.00	0.0000	3750.0	0.0232	ACC	Y	N
699	45.000	92.000	1583.0	0.0000	3750.0	0.0316	ACC	Y	N
700	45.000	92.000	1682.0	0.0000	3750.0	0.0367	ACC	Y	N
701	45.000	92.000	1551.0	0.0000	3750.0	0.0347	ACC	Y	N
702	45.000	92.000	1380.0	0.0000	3750.0	0.0284	ACC	Y	N
703	45.000	92.000	873.00	3.0000	3750.0	0.0241	ACC	Y	N
704	45.000	92.000	393.00	25.000	3750.0	0.0173	ACC	Y	N
705	45.000	92.000	163.00	24.000	3750.0	0.0052	ACC	Y	N
706	45.000	92.000	97.000	0.0000	3750.0	0.0041	ACC	Y	N
707	45.000	92.000	80.000	39.000	3750.0	0.0055	ACC	Y	N
708	45.000	92.000	284.00	10.000	3750.0	0.0057	ACC	Y	N
709	46.000	92.000	0.0000	419.00	3773.0	0.0099	ACC	Y	N
710	46.000	92.000	87.000	145.00	3773.0	0.0078	ACC	Y	N
711	46.000	92.000	69.000	115.00	3773.0	0.0088	ACC	Y	N
712	46.000	92.000	157.00	32.000	3773.0	0.0086	ACC	Y	N
713	46.000	92.000	60.000	85.000	3773.0	0.0119	ACC	Y	N
714	46.000	92.000	36.000	129.00	3773.0	0.0094	ACC	Y	N
715	46.000	92.000	19.000	228.00	3773.0	0.0092	ACC	Y	N
716	46.000	92.000	4.0000	323.00	3773.0	0.0103	ACC	Y	N
717	46.000	92.000	0.0000	503.00	3773.0	0.0116	ACC	Y	N
718	46.000	92.000	0.0000	637.00	3773.0	0.0124	ACC	Y	N
719	46.000	92.000	0.0000	559.00	3773.0	0.0098	ACC	Y	N
720	46.000	92.000	0.0000	543.00	3773.0	0.0105	ACC	Y	N
721	47.000	92.000	523.00	0.0000	3345.0	0.0196	ACC	Y	N
722	47.000	92.000	1274.0	0.0000	3345.0	0.0292	ACC	Y	N
723	47.000	92.000	1481.0	0.0000	3345.0	0.0199	ACC	Y	N
724	47.000	92.000	1258.0	0.0000	3345.0	0.0292	ACC	Y	N
725	47.000	92.000	1296.0	0.0000	3345.0	0.0263	ACC	Y	N
726	47.000	92.000	939.00	0.0000	3345.0	0.0244	ACC	Y	N
727	47.000	92.000	892.00	0.0000	3345.0	0.0205	ACC	Y	N
728	47.000	92.000	309.00	46.000	3345.0	0.0142	ACC	Y	N
729	47.000	92.000	209.00	53.000	3345.0	0.0111	ACC	Y	N
730	47.000	92.000	119.00	36.000	3345.0	0.0104	ACC	Y	N
731	47.000	92.000	39.000	119.00	3345.0	0.0095	ACC	Y	N
732	47.000	92.000	264.00	5.0000	3345.0	0.0153	ACC	Y	N
733	48.000	92.000	21.000	203.00	1774.0	0.0078	ACC	Y	N
734	48.000	92.000	225.00	54.000	1774.0	0.0077	ACC	Y	N
735	48.000	92.000	256.00	34.000	1774.0	0.0093	ACC	Y	N
736	48.000	92.000	411.00	1.0000	1774.0	0.0118	ACC	Y	N
737	48.000	92.000	206.00	25.000	1774.0	0.0095	ACC	Y	N
738	48.000	92.000	149.00	47.000	1774.0	0.0091	ACC	Y	N
739	48.000	92.000	71.000	119.00	1774.0	0.0075	ACC	Y	N
740	48.000	92.000	20.000	273.00	1774.0	0.0063	ACC	Y	N
741	48.000	92.000	0.0000	455.00	1774.0	0.0075	ACC	Y	N
742	48.000	92.000	0.0000	614.00	1774.0	0.0088	ACC	Y	N
743	48.000	92.000	0.0000	512.00	1774.0	0.0084	ACC	Y	N
744	48.000	92.000	0.0000	427.00	1774.0	0.0078	ACC	Y	N
745	49.000	92.000	420.00	2.0000	2329.0	0.0168	ACC	Y	N
746	49.000	92.000	835.00	0.0000	2329.0	0.0200	ACC	Y	N
747	49.000	92.000	1019.0	0.0000	2329.0	0.0271	ACC	Y	N
748	49.000	92.000	907.00	0.0000	2329.0	0.0247	ACC	Y	N
749	49.000	92.000	690.00	0.0000	2329.0	0.0221	ACC	Y	N
750	49.000	92.000	525.00	0.0000	2329.0	0.0176	ACC	Y	N
751	49.000	92.000	326.00	12.000	2329.0	0.0176	ACC	Y	N
752	49.000	92.000	81.000	80.000	2329.0	0.0106	ACC	Y	N
753	49.000	92.000	51.000	207.00	2329.0	0.0102	ACC	Y	N
754	49.000	92.000	3.0000	253.00	2329.0	0.0115	ACC	Y	N
755	49.000	92.000	35.000	348.00	2329.0	0.0116	ACC	Y	N
756	49.000	92.000	118.00	60.000	2329.0	0.0118	ACC	Y	N
757	50.000	92.000	68.000	285.00	4612.0	0.0103	ACC	Y	N
758	50.000	92.000	313.00	12.000	4612.0	0.0118	ACC	Y	N
759	50.000	92.000	572.00	0.0000	4612.0	0.0137	ACC	Y	N
760	50.000	92.000	599.00	0.0000	4612.0	0.0133	ACC	Y	N
761	50.000	92.000	314.00	0.0000	4612.0	0.0117	ACC	Y	N
762	50.000	92.000	223.00	0.0000	4612.0	0.0096	ACC	Y	N
763	50.000	92.000	10.000	177.00	4612.0	0.0072	ACC	Y	N
764	50.000	92.000	0.0000	404.00	4612.0	0.0076	ACC	Y	N
765	50.000	92.000	0.0000	575.00	4612.0	0.0084	ACC	Y	N
766	50.000	92.000	0.0000	773.00	4612.0	0.0092	ACC	Y	N

767	50.000	92.000	0.0000	801.00	4612.0	0.0097	ACC	Y	N
768	50.000	92.000	0.0000	0.0000	4612.0	0.0106	ACC	Y	N
769	51.000	92.000	388.00	9.0000	6015.0	0.0170	ACC	Y	N
770	51.000	92.000	1013.0	0.0000	6015.0	0.0218	ACC	Y	N
771	51.000	92.000	910.00	0.0000	6015.0	0.0219	ACC	Y	N
772	51.000	92.000	999.00	0.0000	6015.0	0.0214	ACC	Y	N
773	51.000	92.000	752.00	0.0000	6015.0	0.0187	ACC	Y	N
774	51.000	92.000	643.00	0.0000	6015.0	0.0184	ACC	Y	N
775	51.000	92.000	437.00	11.000	6015.0	0.0165	ACC	Y	N
776	51.000	92.000	78.000	123.00	6015.0	0.0169	ACC	Y	N
777	51.000	92.000	6.0000	206.00	6015.0	0.0147	ACC	Y	N
778	51.000	92.000	0.0000	263.00	6015.0	0.0149	ACC	Y	N
779	51.000	92.000	2.0000	193.00	6015.0	0.0150	ACC	Y	N
780	51.000	92.000	81.000	120.00	6015.0	0.0140	ACC	Y	N
781	52.000	92.000	129.00	61.000	1758.0	0.0093	ACC	Y	N
782	52.000	92.000	354.00	25.000	1758.0	0.0130	ACC	Y	N
783	52.000	92.000	363.00	28.000	1758.0	0.0174	ACC	Y	N
784	52.000	92.000	626.00	0.0000	1758.0	0.0218	ACC	Y	N
785	52.000	92.000	661.00	0.0000	1758.0	0.0226	ACC	Y	N
786	52.000	92.000	317.00	8.0000	1758.0	0.0183	ACC	Y	N
787	52.000	92.000	350.00	28.000	1758.0	0.0164	ACC	Y	N
788	52.000	92.000	104.00	103.00	1758.0	0.0050	ACC	Y	N
789	52.000	92.000	16.000	199.00	1758.0	0.0056	ACC	Y	N
790	52.000	92.000	0.0000	462.00	1758.0	0.0061	ACC	Y	N
791	52.000	92.000	0.0000	521.00	1758.0	0.0130	ACC	Y	N
792	52.000	92.000	0.0000	0.0000	1758.0	0.0075	ACC	Y	N
793	53.000	92.000	122.00	170.00	2639.0	0.0132	ACC	Y	N
794	53.000	92.000	415.00	7.0000	2639.0	0.0173	ACC	Y	N
795	53.000	92.000	526.00	18.000	2639.0	0.0185	ACC	Y	N
796	53.000	92.000	635.00	0.0000	2639.0	0.0205	ACC	Y	N
797	53.000	92.000	486.00	0.0000	2639.0	0.0201	ACC	Y	N
798	53.000	92.000	401.00	3.0000	2639.0	0.0178	ACC	Y	N
799	53.000	92.000	189.00	68.000	2639.0	0.0129	ACC	Y	N
800	53.000	92.000	77.000	81.000	2639.0	0.0105	ACC	Y	N
801	53.000	92.000	0.0000	275.00	2639.0	0.0097	ACC	Y	N
802	53.000	92.000	0.0000	559.00	2639.0	0.0100	ACC	Y	N
803	53.000	92.000	0.0000	354.00	2639.0	0.0111	ACC	Y	N
804	53.000	92.000	9.0000	275.00	2639.0	0.0084	ACC	Y	N
805	54.000	92.000	0.0000	79.000	2834.0	0.0080	ACC	Y	N
806	54.000	92.000	393.00	6.0000	2834.0	0.0115	ACC	Y	N
807	54.000	92.000	393.00	6.0000	2834.0	0.0115	ACC	Y	N
808	54.000	92.000	0.0000	0.0000	2834.0	0.0115	ACC	Y	N
809	54.000	92.000	389.00	3.0000	2834.0	0.0128	ACC	Y	N
810	54.000	92.000	341.00	5.0000	2834.0	0.0102	ACC	Y	N
811	54.000	92.000	142.00	74.000	2834.0	0.0091	ACC	Y	N
812	54.000	92.000	57.000	155.00	2834.0	0.0070	ACC	Y	N
813	54.000	92.000	0.0000	312.00	2834.0	0.0075	ACC	Y	N
814	54.000	92.000	0.0000	557.00	2834.0	0.0097	ACC	Y	N
815	54.000	92.000	0.0000	389.00	2834.0	0.0085	ACC	Y	N
816	54.000	92.000	15.000	288.00	2834.0	0.0089	ACC	Y	N
817	55.000	92.000	261.00	44.000	2560.0	0.0138	ACC	Y	N
818	55.000	92.000	761.00	0.0000	2560.0	0.0182	ACC	Y	N
819	55.000	92.000	860.00	0.0000	2560.0	0.0183	ACC	Y	N
820	55.000	92.000	885.00	0.0000	2560.0	0.0194	ACC	Y	N
821	55.000	92.000	698.00	0.0000	2560.0	0.0186	ACC	Y	N
822	55.000	92.000	551.00	2.0000	2560.0	0.0178	ACC	Y	N
823	55.000	92.000	320.00	19.000	2560.0	0.0137	ACC	Y	N
824	55.000	92.000	125.00	67.000	2560.0	0.0110	ACC	Y	N
825	55.000	92.000	9.0000	172.00	2560.0	0.0118	ACC	Y	N
826	55.000	92.000	0.0000	334.00	2560.0	0.0138	ACC	Y	N
827	55.000	92.000	11.000	170.00	2560.0	0.0138	ACC	Y	N
828	55.000	92.000	9.0000	172.00	2560.0	0.0124	ACC	Y	N
829	33.000	91.000	163.00	109.00	4022.0	0.0098	ACC	Y	N
830	33.000	91.000	0.0000	0.0000	4022.0	0.0089	ACC	Y	N
831	33.000	91.000	0.0000	0.0000	4022.0	0.0130	ACC	Y	N
832	33.000	91.000	0.0000	0.0000	4022.0	0.0142	ACC	Y	N
833	33.000	91.000	0.0000	0.0000	4022.0	0.0112	ACC	Y	N
834	33.000	91.000	0.0000	0.0000	4022.0	0.0096	ACC	Y	N
835	33.000	91.000	0.0000	0.0000	4022.0	0.0073	ACC	Y	N
836	33.000	91.000	0.0000	0.0000	4022.0	0.0074	ACC	Y	N
837	33.000	91.000	0.0000	436.00	4022.0	0.0077	ACC	Y	N

838	33.000	91.000	0.0000	510.00	4022.0	0.0076	ACC	Y	N
839	33.000	91.000	0.0000	0.0000	4022.0	0.0083	ACC	Y	N
840	33.000	91.000	0.0000	0.0000	4022.0	0.0059	ACC	Y	N
841	34.000	91.000	32.000	91.000	2641.0	0.0060	ACC	Y	N
842	34.000	91.000	0.0000	0.0000	2641.0	0.0072	ACC	Y	N
843	34.000	91.000	0.0000	0.0000	2641.0	0.0112	ACC	Y	N
844	34.000	91.000	0.0000	0.0000	2641.0	0.0109	ACC	Y	N
845	34.000	91.000	0.0000	0.0000	2641.0	0.0063	ACC	Y	N
846	34.000	91.000	0.0000	0.0000	2641.0	0.0086	ACC	Y	N
847	34.000	91.000	0.0000	0.0000	2641.0	0.0077	ACC	Y	N
848	34.000	91.000	0.0000	0.0000	2641.0	0.0061	ACC	Y	N
849	34.000	91.000	235.00	1.0000	2641.0	0.0066	ACC	Y	N
850	34.000	91.000	0.0000	508.00	2641.0	0.0080	ACC	Y	N
851	34.000	91.000	0.0000	0.0000	2641.0	0.0058	ACC	Y	N
852	34.000	91.000	0.0000	0.0000	2641.0	0.0083	ACC	Y	N
853	35.000	91.000	8.0000	192.00	2129.0	0.0076	ACC	Y	N
854	35.000	91.000	500.00	0.0000	2129.0	0.0157	ACC	Y	N
855	35.000	91.000	848.00	0.0000	2129.0	0.0128	ACC	Y	N
856	35.000	91.000	909.00	0.0000	2129.0	0.0225	ACC	Y	N
857	35.000	91.000	729.00	0.0000	2129.0	0.0196	ACC	Y	N
858	35.000	91.000	431.00	0.0000	2129.0	0.0147	ACC	Y	N
859	35.000	91.000	149.00	9.0000	2129.0	0.0121	ACC	Y	N
860	35.000	91.000	106.00	78.000	2129.0	0.0069	ACC	Y	N
861	35.000	91.000	0.0000	331.00	2129.0	0.0092	ACC	Y	N
862	35.000	91.000	0.0000	338.00	2129.0	0.0057	ACC	Y	N
863	35.000	91.000	0.0000	164.00	2129.0	0.0057	ACC	Y	N
864	35.000	91.000	87.000	66.000	2129.0	0.0085	ACC	Y	N
865	36.000	91.000	20.000	87.000	2516.0	0.0075	ACC	Y	N
866	36.000	91.000	0.0000	0.0000	2516.0	0.0085	ACC	Y	N
867	36.000	91.000	0.0000	0.0000	2516.0	0.0076	ACC	Y	N
868	36.000	91.000	0.0000	0.0000	2516.0	0.0151	ACC	Y	N
869	36.000	91.000	0.0000	0.0000	2516.0	0.0150	ACC	Y	N
870	36.000	91.000	0.0000	0.0000	2516.0	0.0116	ACC	Y	N
871	36.000	91.000	0.0000	0.0000	2516.0	0.0126	ACC	Y	N
872	36.000	91.000	0.0000	0.0000	2516.0	0.0098	ACC	Y	N
873	36.000	91.000	211.00	2.0000	2516.0	0.0078	ACC	Y	N
874	36.000	91.000	0.0000	476.00	2516.0	0.0090	ACC	Y	N
875	36.000	91.000	0.0000	0.0000	2516.0	0.0079	ACC	Y	N
876	36.000	91.000	0.0000	0.0000	2516.0	0.0094	ACC	Y	N
877	37.000	91.000	8.0000	214.00	3886.0	0.0058	ACC	Y	N
878	37.000	91.000	157.00	58.000	3886.0	0.0064	ACC	Y	N
879	37.000	91.000	380.00	0.0000	3886.0	0.0091	ACC	Y	N
880	37.000	91.000	409.00	0.0000	3886.0	0.0096	ACC	Y	N
881	37.000	91.000	163.00	13.000	3886.0	0.0088	ACC	Y	N
882	37.000	91.000	320.00	4.0000	3886.0	0.0075	ACC	Y	N
883	37.000	91.000	60.000	56.000	3886.0	0.0074	ACC	Y	N
884	37.000	91.000	7.0000	266.00	3886.0	0.0061	ACC	Y	N
885	37.000	91.000	0.0000	474.00	3886.0	0.0058	ACC	Y	N
886	37.000	91.000	0.0000	647.00	3886.0	0.0068	ACC	Y	N
887	37.000	91.000	0.0000	626.00	3886.0	0.0066	ACC	Y	N
888	37.000	91.000	0.0000	452.00	3886.0	0.0067	ACC	Y	N
889	38.000	91.000	89.000	123.00	2954.0	0.0088	ACC	Y	N
890	38.000	91.000	262.00	32.000	2954.0	0.0111	ACC	Y	N
891	38.000	91.000	669.00	0.0000	2954.0	0.0137	ACC	Y	N
892	38.000	91.000	739.00	0.0000	2954.0	0.0201	ACC	Y	N
893	38.000	91.000	337.00	0.0000	2954.0	0.0160	ACC	Y	N
894	38.000	91.000	217.00	45.000	2954.0	0.0127	ACC	Y	N
895	38.000	91.000	49.000	104.00	2954.0	0.0095	ACC	Y	N
896	38.000	91.000	6.0000	373.00	2954.0	0.0090	ACC	Y	N
897	38.000	91.000	3.0000	384.00	2954.0	0.0093	ACC	Y	N
898	38.000	91.000	0.0000	505.00	2954.0	0.0094	ACC	Y	N
899	38.000	91.000	0.0000	402.00	2954.0	0.0095	ACC	Y	N
900	38.000	91.000	38.000	197.00	2954.0	0.0094	ACC	Y	N
901	39.000	91.000	514.00	3.0000	4633.0	0.0143	ACC	Y	N
902	39.000	91.000	776.00	0.0000	4633.0	0.0196	ACC	Y	N
903	39.000	91.000	0.0000	0.0000	4633.0	0.0265	ACC	Y	N
904	39.000	91.000	0.0000	0.0000	4633.0	0.0346	ACC	Y	N
905	39.000	91.000	0.0000	0.0000	4633.0	0.0224	ACC	Y	N
906	39.000	91.000	0.0000	0.0000	4633.0	0.0234	ACC	Y	N
907	39.000	91.000	0.0000	0.0000	4633.0	0.0176	ACC	Y	N
908	39.000	91.000	0.0000	0.0000	4633.0	0.0118	ACC	Y	N

909	39.000	91.000	25.000	78.000	4633.0	0.0077	ACC	Y	N
910	39.000	91.000	1.0000	262.00	4633.0	0.0079	ACC	Y	N
911	39.000	91.000	0.0000	0.0000	4633.0	0.0076	ACC	Y	N
912	39.000	91.000	0.0000	0.0000	4633.0	0.0083	ACC	Y	N
913	40.000	91.000	404.00	7.0000	0.0000	0.0000	ACC	Y	N
914	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
915	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
916	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
917	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
918	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
919	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
920	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
921	40.000	91.000	38.000	111.00	0.0000	0.0000	ACC	Y	N
922	40.000	91.000	5.0000	180.00	0.0000	0.0000	ACC	Y	N
923	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
924	40.000	91.000	0.0000	0.0000	0.0000	0.0000	ACC	Y	N
925	41.000	91.000	137.00	20.000	3994.0	0.0061	ACC	Y	N
926	41.000	91.000	415.00	0.0000	3994.0	0.0102	ACC	Y	N
927	41.000	91.000	673.00	0.0000	3994.0	0.0158	ACC	Y	N
928	41.000	91.000	730.00	0.0000	3994.0	0.0166	ACC	Y	N
929	41.000	91.000	506.00	0.0000	3994.0	0.0111	ACC	Y	N
930	41.000	91.000	444.00	0.0000	3994.0	0.0123	ACC	Y	N
931	41.000	91.000	124.00	31.000	3994.0	0.0071	ACC	Y	N
932	41.000	91.000	0.0000	233.00	3994.0	0.0065	ACC	Y	N
933	41.000	91.000	0.0000	386.00	3994.0	0.0046	ACC	Y	N
934	41.000	91.000	0.0000	318.00	3994.0	0.0060	ACC	Y	N
935	41.000	91.000	0.0000	292.00	3994.0	0.0055	ACC	Y	N
936	41.000	91.000	0.0000	96.000	3994.0	0.0053	ACC	Y	N
937	42.000	91.000	739.00	0.0000	2392.0	0.0208	ACC	Y	N
938	42.000	91.000	0.0000	0.0000	2392.0	0.0245	ACC	Y	N
939	42.000	91.000	0.0000	0.0000	2392.0	0.0310	ACC	Y	N
940	42.000	91.000	0.0000	0.0000	2392.0	0.0335	ACC	Y	N
941	42.000	91.000	0.0000	0.0000	2392.0	0.0267	ACC	Y	N
942	42.000	91.000	0.0000	0.0000	2392.0	0.0270	ACC	Y	N
943	42.000	91.000	0.0000	0.0000	2392.0	0.0211	ACC	Y	N
944	42.000	91.000	0.0000	0.0000	2392.0	0.0168	ACC	Y	N
945	42.000	91.000	113.00	62.000	2392.0	0.0141	ACC	Y	N
946	42.000	91.000	85.000	68.000	2392.0	0.0135	ACC	Y	N
947	42.000	91.000	0.0000	0.0000	2392.0	0.0110	ACC	Y	N
948	42.000	91.000	0.0000	0.0000	2392.0	0.0166	ACC	Y	N
949	43.000	91.000	127.00	103.00	4124.0	0.0102	ACC	Y	N
950	43.000	91.000	311.00	8.0000	4124.0	0.0129	ACC	Y	N
951	43.000	91.000	451.00	5.0000	4124.0	0.0166	ACC	Y	N
952	43.000	91.000	662.00	0.0000	4124.0	0.0201	ACC	Y	N
953	43.000	91.000	549.00	0.0000	4124.0	0.0169	ACC	Y	N
954	43.000	91.000	431.00	13.000	4124.0	0.0172	ACC	Y	N
955	43.000	91.000	182.00	58.000	4124.0	0.0127	ACC	Y	N
956	43.000	91.000	1.0000	320.00	4124.0	0.0202	ACC	Y	N
957	43.000	91.000	7.0000	313.00	4124.0	0.0087	ACC	Y	N
958	43.000	91.000	0.0000	476.00	4124.0	0.0104	ACC	Y	N
959	43.000	91.000	0.0000	411.00	4124.0	0.0093	ACC	Y	N
960	43.000	91.000	31.000	212.00	4124.0	0.0089	ACC	Y	N
961	44.000	91.000	223.00	59.000	2800.0	0.0097	ACC	Y	N
962	44.000	91.000	303.00	8.0000	2800.0	0.0117	ACC	Y	N
963	44.000	91.000	719.00	0.0000	2800.0	0.0178	ACC	Y	N
964	44.000	91.000	828.00	0.0000	2800.0	0.0222	ACC	Y	N
965	44.000	91.000	482.00	0.0000	2800.0	0.0154	ACC	Y	N
966	44.000	91.000	307.00	31.000	2800.0	0.0135	ACC	Y	N
967	44.000	91.000	73.000	50.000	2800.0	0.0087	ACC	Y	N
968	44.000	91.000	11.000	282.00	2800.0	0.0093	ACC	Y	N
969	44.000	91.000	0.0000	427.00	2800.0	0.0100	ACC	Y	N
970	44.000	91.000	0.0000	539.00	2800.0	0.0099	ACC	Y	N
971	44.000	91.000	0.0000	457.00	2800.0	0.0101	ACC	Y	N
972	44.000	91.000	33.000	279.00	2800.0	0.0094	ACC	Y	N
973	45.000	91.000	625.00	0.0000	3750.0	0.0195	ACC	Y	N
974	45.000	91.000	0.0000	0.0000	3750.0	0.0252	ACC	Y	N
975	45.000	91.000	0.0000	0.0000	3750.0	0.0291	ACC	Y	N
976	45.000	91.000	1811.0	0.0000	3750.0	0.0348	ACC	Y	N
977	45.000	91.000	1413.0	0.0000	3750.0	0.0292	ACC	Y	N
978	45.000	91.000	1190.0	0.0000	3750.0	0.0282	ACC	Y	N
979	45.000	91.000	0.0000	0.0000	3750.0	0.0230	ACC	Y	N

980	45.000	91.000	0.0000	0.0000	3750.0	0.0174	ACC	Y	N
981	45.000	91.000	161.00	51.000	3750.0	0.0079	ACC	Y	N
982	45.000	91.000	61.000	108.00	3750.0	0.0047	ACC	Y	N
983	45.000	91.000	0.0000	0.0000	3750.0	0.0045	ACC	Y	N
984	45.000	91.000	0.0000	0.0000	3750.0	0.0053	ACC	Y	N
985	46.000	91.000	5.0000	458.00	3773.0	0.0086	ACC	Y	N
986	46.000	91.000	6.0000	219.00	3773.0	0.0080	ACC	Y	N
987	46.000	91.000	77.000	131.00	3773.0	0.0073	ACC	Y	N
988	46.000	91.000	75.000	130.00	3773.0	0.0082	ACC	Y	N
989	46.000	91.000	70.000	78.000	3773.0	0.0067	ACC	Y	N
990	46.000	91.000	37.000	161.00	3773.0	0.0071	ACC	Y	N
991	46.000	91.000	0.0000	377.00	3773.0	0.0081	ACC	Y	N
992	46.000	91.000	0.0000	531.00	3773.0	0.0104	ACC	Y	N
993	46.000	91.000	0.0000	534.00	3773.0	0.0098	ACC	Y	N
994	46.000	91.000	0.0000	565.00	3773.0	0.0103	ACC	Y	N
995	46.000	91.000	0.0000	601.00	3773.0	0.0095	ACC	Y	N
996	46.000	91.000	0.0000	563.00	3773.0	0.0098	ACC	Y	N
997	47.000	91.000	655.00	0.0000	3345.0	0.0201	ACC	Y	N
998	47.000	91.000	0.0000	0.0000	3345.0	0.0266	ACC	Y	N
999	47.000	91.000	0.0000	0.0000	3345.0	0.0326	ACC	Y	N
1000	47.000	91.000	2022.0	0.0000	3345.0	0.0362	ACC	Y	N
1001	47.000	91.000	1328.0	0.0000	3345.0	0.0265	ACC	Y	N
1002	47.000	91.000	1144.0	0.0000	3345.0	0.0274	ACC	Y	N
1003	47.000	91.000	748.00	0.0000	3345.0	0.0210	ACC	Y	N
1004	47.000	91.000	437.00	17.000	3345.0	0.0162	ACC	Y	N
1005	47.000	91.000	22.000	96.000	3345.0	0.0097	ACC	Y	N
1006	47.000	91.000	10.000	166.00	3345.0	0.0109	ACC	Y	N
1007	47.000	91.000	12.000	145.00	3345.0	0.0113	ACC	Y	N
1008	47.000	91.000	142.00	144.00	3345.0	0.0110	ACC	Y	N
1009	48.000	91.000	53.000	212.00	1780.0	0.0076	ACC	Y	N
1010	48.000	91.000	148.00	23.000	1780.0	0.0065	ACC	Y	N
1011	48.000	91.000	239.00	26.000	1780.0	0.0090	ACC	Y	N
1012	48.000	91.000	396.00	6.0000	1780.0	0.0108	ACC	Y	N
1013	48.000	91.000	251.00	9.0000	1780.0	0.0089	ACC	Y	N
1014	48.000	91.000	144.00	67.000	1780.0	0.0074	ACC	Y	N
1015	48.000	91.000	14.000	192.00	1780.0	0.0072	ACC	Y	N
1016	48.000	91.000	0.0000	346.00	1780.0	0.0080	ACC	Y	N
1017	48.000	91.000	0.0000	448.00	1780.0	0.0077	ACC	Y	N
1018	48.000	91.000	0.0000	538.00	1780.0	0.0083	ACC	Y	N
1019	48.000	91.000	0.0000	510.00	1780.0	0.0082	ACC	Y	N
1020	48.000	91.000	0.0000	430.00	1780.0	0.0076	ACC	Y	N
1021	49.000	91.000	487.00	195.00	2516.0	0.0180	ACC	Y	N
1022	49.000	91.000	711.00	0.0000	2516.0	0.0192	ACC	Y	N
1023	49.000	91.000	1425.0	0.0000	2516.0	0.0193	ACC	Y	N
1024	49.000	91.000	1208.0	0.0000	2516.0	0.0292	ACC	Y	N
1025	49.000	91.000	670.00	0.0000	2516.0	0.0215	ACC	Y	N
1026	49.000	91.000	711.00	0.0000	2516.0	0.0182	ACC	Y	N
1027	49.000	91.000	515.00	0.0000	2516.0	0.0166	ACC	Y	N
1028	49.000	91.000	315.00	0.0000	2516.0	0.0140	ACC	Y	N
1029	49.000	91.000	40.000	95.000	2516.0	0.0100	ACC	Y	N
1030	49.000	91.000	0.0000	384.00	2516.0	0.0095	ACC	Y	N
1031	49.000	91.000	0.0000	371.00	2516.0	0.0095	ACC	Y	N
1032	49.000	91.000	68.000	89.000	2516.0	0.0104	ACC	Y	N
1033	50.000	91.000	26.000	157.00	4398.0	0.0092	ACC	Y	N
1034	50.000	91.000	10.000	0.0000	4398.0	0.0081	ACC	Y	N
1035	50.000	91.000	792.00	0.0000	4398.0	0.0135	ACC	Y	N
1036	50.000	91.000	646.00	0.0000	4398.0	0.0120	ACC	Y	N
1037	50.000	91.000	282.00	0.0000	4398.0	0.0103	ACC	Y	N
1038	50.000	91.000	339.00	0.0000	4398.0	0.0107	ACC	Y	N
1039	50.000	91.000	44.000	53.000	4398.0	0.0086	ACC	Y	N
1040	50.000	91.000	16.000	194.00	4398.0	0.0084	ACC	Y	N
1041	50.000	91.000	0.0000	535.00	4398.0	0.0090	ACC	Y	N
1042	50.000	91.000	809.00	0.0000	4398.0	0.0104	ACC	Y	N
1043	50.000	91.000	0.0000	725.00	4398.0	0.0112	ACC	Y	N
1044	50.000	91.000	0.0000	550.00	4398.0	0.0111	ACC	Y	N
1045	51.000	91.000	348.00	11.000	6015.0	0.0167	ACC	Y	N
1046	51.000	91.000	633.00	1.0000	6015.0	0.0174	ACC	Y	N
1047	51.000	91.000	1314.0	0.0000	6015.0	0.0239	ACC	Y	N
1048	51.000	91.000	1476.0	0.0000	6015.0	0.0250	ACC	Y	N
1049	51.000	91.000	845.00	0.0000	6015.0	0.0185	ACC	Y	N
1050	51.000	91.000	669.00	5.0000	6015.0	0.0201	ACC	Y	N

1051	51.000	91.000	327.00	19.000	6015.0	0.0126	ACC	Y	N
1052	51.000	91.000	102.00	170.00	6015.0	0.0161	ACC	Y	N
1053	51.000	91.000	0.0000	303.00	6015.0	0.0167	ACC	Y	N
1054	51.000	91.000	0.0000	365.00	6015.0	0.0168	ACC	Y	N
1055	51.000	91.000	305.00	0.0000	6015.0	0.0171	ACC	Y	N
1056	51.000	91.000	114.00	161.00	6015.0	0.0146	ACC	Y	N
1057	52.000	91.000	100.00	141.00	1892.0	0.0068	ACC	Y	N
1058	52.000	91.000	298.00	0.0000	1892.0	0.0074	ACC	Y	N
1059	52.000	91.000	459.00	10.000	1892.0	0.0123	ACC	Y	N
1060	52.000	91.000	650.00	0.0000	1892.0	0.0158	ACC	Y	N
1061	52.000	91.000	437.00	7.0000	1892.0	0.0157	ACC	Y	N
1062	52.000	91.000	312.00	44.000	1892.0	0.0142	ACC	Y	N
1063	52.000	91.000	99.000	106.00	1892.0	0.0098	ACC	Y	N
1064	52.000	91.000	16.000	299.00	1892.0	0.0070	ACC	Y	N
1065	52.000	91.000	0.0000	411.00	1892.0	0.0087	ACC	Y	N
1066	52.000	91.000	0.0000	553.00	1892.0	0.0080	ACC	Y	N
1067	52.000	91.000	0.0000	456.00	1892.0	0.0091	ACC	Y	N
1068	52.000	91.000	17.000	283.00	1892.0	0.0097	ACC	Y	N
1069	53.000	91.000	163.00	102.00	2639.0	0.0107	ACC	Y	N
1070	53.000	91.000	289.00	2.0000	2639.0	0.0157	ACC	Y	N
1071	53.000	91.000	439.00	10.000	2639.0	0.0219	ACC	Y	N
1072	53.000	91.000	599.00	3.0000	2639.0	0.0190	ACC	Y	N
1073	53.000	91.000	465.00	5.0000	2639.0	0.0205	ACC	Y	N
1074	53.000	91.000	311.00	45.000	2639.0	0.0181	ACC	Y	N
1075	53.000	91.000	109.00	104.00	2639.0	0.0119	ACC	Y	N
1076	53.000	91.000	14.000	282.00	2639.0	0.0098	ACC	Y	N
1077	53.000	91.000	0.0000	360.00	2639.0	0.0104	ACC	Y	N
1078	53.000	91.000	0.0000	530.00	2639.0	0.0102	ACC	Y	N
1079	53.000	91.000	0.0000	420.00	2639.0	0.0101	ACC	Y	N
1080	53.000	91.000	14.000	245.00	2639.0	0.0081	ACC	Y	N
1081	54.000	91.000	78.000	151.00	2850.0	0.0071	ACC	Y	N
1082	54.000	91.000	10.000	200.00	2850.0	0.0080	ACC	Y	N
1083	54.000	91.000	396.00	4.0000	2850.0	0.0104	ACC	Y	N
1084	54.000	91.000	580.00	0.0000	2850.0	0.0134	ACC	Y	N
1085	54.000	91.000	361.00	6.0000	2850.0	0.0105	ACC	Y	N
1086	54.000	91.000	228.00	49.000	2850.0	0.0085	ACC	Y	N
1087	54.000	91.000	93.000	40.000	2850.0	0.0070	ACC	Y	N
1088	54.000	91.000	2.0000	301.00	2850.0	0.0078	ACC	Y	N
1089	54.000	91.000	0.0000	410.00	2850.0	0.0080	ACC	Y	N
1090	54.000	91.000	0.0000	533.00	2850.0	0.0083	ACC	Y	N
1091	54.000	91.000	0.0000	439.00	2850.0	0.0095	ACC	Y	N
1092	54.000	91.000	8.0000	300.00	2850.0	0.0088	ACC	Y	N
1093	55.000	91.000	345.00	17.000	2219.0	0.0172	ACC	Y	N
1094	55.000	91.000	438.00	4.0000	2219.0	0.0176	ACC	Y	N
1095	55.000	91.000	1089.0	0.0000	2219.0	0.0220	ACC	Y	N
1096	55.000	91.000	1269.0	0.0000	2219.0	0.0266	ACC	Y	N
1097	55.000	91.000	733.00	0.0000	2219.0	0.0220	ACC	Y	N
1098	55.000	91.000	559.00	12.000	2219.0	0.0200	ACC	Y	N
1099	55.000	91.000	241.00	3.0000	2219.0	0.0160	ACC	Y	N
1100	55.000	91.000	4.0000	272.00	2219.0	0.0157	ACC	Y	N
1101	55.000	91.000	0.0000	309.00	2219.0	0.0156	ACC	Y	N
1102	55.000	91.000	0.0000	402.00	2219.0	0.0161	ACC	Y	N
1103	55.000	91.000	2.0000	347.00	2219.0	0.0154	ACC	Y	N
1104	55.000	91.000	120.00	192.00	2219.0	0.0229	ACC	Y	N
1105	16.000	91.000	105.00	79.000	2376.0	0.0069	AETC	Y	N
1106	16.000	91.000	293.00	10.000	2376.0	0.0107	AETC	Y	N
1107	16.000	91.000	824.00	0.0000	2376.0	0.0189	AETC	Y	N
1108	16.000	91.000	864.00	0.0000	2376.0	0.0242	AETC	Y	N
1109	16.000	91.000	356.00	0.0000	2376.0	0.0128	AETC	Y	N
1110	16.000	91.000	259.00	21.000	2376.0	0.0125	AETC	Y	N
1111	16.000	91.000	62.000	79.000	2376.0	0.0072	AETC	Y	N
1112	16.000	91.000	10.000	301.00	2376.0	0.0066	AETC	Y	N
1113	16.000	91.000	0.0000	443.00	2376.0	0.0070	AETC	Y	N
1114	16.000	91.000	0.0000	594.00	2376.0	0.0077	AETC	Y	N
1115	16.000	91.000	0.0000	460.00	2376.0	0.0073	AETC	Y	N
1116	16.000	91.000	31.000	233.00	2376.0	0.0070	AETC	Y	N
1117	17.000	91.000	355.00	14.000	4631.0	0.0142	AETC	N	N
1118	17.000	91.000	452.00	0.0000	4631.0	0.0181	AETC	N	N
1119	17.000	91.000	1045.0	0.0000	4631.0	0.0238	AETC	N	N
1120	17.000	91.000	1251.0	0.0000	4631.0	0.0268	AETC	N	N
1121	17.000	91.000	836.00	0.0000	4631.0	0.0214	AETC	N	N

1122	17.000	91.000	628.00	0.0000	4631.0	0.0203	AETC	N	N
1123	17.000	91.000	232.00	25.000	4631.0	0.0153	AETC	N	N
1124	17.000	91.000	53.000	263.00	4631.0	0.0125	AETC	N	N
1125	17.000	91.000	0.0000	423.00	4631.0	0.0129	AETC	N	N
1126	17.000	91.000	0.0000	449.00	4631.0	0.0131	AETC	N	N
1127	17.000	91.000	0.0000	386.00	4631.0	0.0131	AETC	N	N
1128	17.000	91.000	90.000	225.00	4631.0	0.0107	AETC	N	N
1129	18.000	91.000	175.00	81.000	1475.0	0.0082	AETC	Y	N
1130	18.000	91.000	251.00	16.000	1475.0	0.0122	AETC	Y	N
1131	18.000	91.000	488.00	2.0000	1475.0	0.0108	AETC	Y	N
1132	18.000	91.000	642.00	0.0000	1475.0	0.0171	AETC	Y	N
1133	18.000	91.000	424.00	0.0000	1475.0	0.0144	AETC	Y	N
1134	18.000	91.000	284.00	43.000	1475.0	0.0077	AETC	Y	N
1135	18.000	91.000	51.000	66.000	1475.0	0.0098	AETC	Y	N
1136	18.000	91.000	6.0000	289.00	1475.0	0.0093	AETC	Y	N
1137	18.000	91.000	0.0000	418.00	1475.0	0.0100	AETC	Y	N
1138	18.000	91.000	0.0000	548.00	1475.0	0.0101	AETC	Y	N
1139	18.000	91.000	0.0000	548.00	1475.0	0.0065	AETC	Y	N
1140	18.000	91.000	15.000	328.00	1475.0	0.0096	AETC	Y	N
1141	19.000	91.000	124.00	88.000	1790.0	0.0090	AETC	N	N
1142	19.000	91.000	257.00	26.000	1790.0	0.0100	AETC	N	N
1143	19.000	91.000	610.00	0.0000	1790.0	0.0134	AETC	N	N
1144	19.000	91.000	651.00	0.0000	1790.0	0.0139	AETC	N	N
1145	19.000	91.000	364.00	0.0000	1790.0	0.0114	AETC	N	N
1146	19.000	91.000	214.00	30.000	1790.0	0.0103	AETC	N	N
1147	19.000	91.000	38.000	98.000	1790.0	0.0076	AETC	N	N
1148	19.000	91.000	8.0000	371.00	1790.0	0.0084	AETC	N	N
1149	19.000	91.000	0.0000	413.00	1790.0	0.0088	AETC	N	N
1150	19.000	91.000	0.0000	517.00	1790.0	0.0086	AETC	N	N
1151	19.000	91.000	0.0000	481.00	1790.0	0.0085	AETC	N	N
1152	19.000	91.000	33.000	248.00	1790.0	0.0089	AETC	N	N
1153	20.000	91.000	92.000	157.00	1498.0	0.0095	AETC	N	N
1154	20.000	91.000	229.00	12.000	1498.0	0.0109	AETC	N	N
1155	20.000	91.000	365.00	11.000	1498.0	0.0143	AETC	N	N
1156	20.000	91.000	520.00	0.0000	1498.0	0.0166	AETC	N	N
1157	20.000	91.000	322.00	4.0000	1498.0	0.0132	AETC	N	N
1158	20.000	91.000	224.00	33.000	1498.0	0.0107	AETC	N	N
1159	20.000	91.000	29.000	130.00	1498.0	0.0090	AETC	N	N
1160	20.000	91.000	0.0000	340.00	1498.0	0.0111	AETC	N	N
1161	20.000	91.000	0.0000	407.00	1498.0	0.0097	AETC	N	N
1162	20.000	91.000	0.0000	539.00	1498.0	0.0112	AETC	N	N
1163	20.000	91.000	0.0000	508.00	1498.0	0.0126	AETC	N	N
1164	20.000	91.000	1.0000	355.00	1498.0	0.0100	AETC	N	N
1165	21.000	91.000	44.000	169.00	7019.0	0.0102	AETC	N	N
1166	21.000	91.000	125.00	35.000	7019.0	0.0107	AETC	N	N
1167	21.000	91.000	276.00	33.000	7019.0	0.0129	AETC	N	N
1168	21.000	91.000	351.00	1.0000	7019.0	0.0125	AETC	N	N
1169	21.000	91.000	223.00	3.0000	7019.0	0.0116	AETC	N	N
1170	21.000	91.000	137.00	65.000	7019.0	0.0104	AETC	N	N
1171	21.000	91.000	0.0000	174.00	7019.0	0.0092	AETC	N	N
1172	21.000	91.000	0.0000	374.00	7019.0	0.0097	AETC	N	N
1173	21.000	91.000	0.0000	471.00	7019.0	0.0102	AETC	N	N
1174	21.000	91.000	0.0000	556.00	7019.0	0.0097	AETC	N	N
1175	21.000	91.000	0.0000	543.00	7019.0	0.0110	AETC	N	N
1176	21.000	91.000	0.0000	381.00	7019.0	0.0091	AETC	N	N
1177	22.000	91.000	34.000	226.00	10326.0	0.0044	AETC	N	N
1178	22.000	91.000	164.00	83.000	10326.0	0.0043	AETC	N	N
1179	22.000	91.000	442.00	23.000	10326.0	0.0060	AETC	N	N
1180	22.000	91.000	510.00	0.0000	10326.0	0.0069	AETC	N	N
1181	22.000	91.000	556.00	8.0000	10326.0	0.0052	AETC	N	N
1182	22.000	91.000	106.00	88.000	10326.0	0.0043	AETC	N	N
1183	22.000	91.000	9.0000	210.00	10326.0	0.0042	AETC	N	N
1184	22.000	91.000	0.0000	378.00	10326.0	0.0047	AETC	N	N
1185	22.000	91.000	0.0000	523.00	10326.0	0.0050	AETC	N	N
1186	22.000	91.000	0.0000	579.00	10326.0	0.0046	AETC	N	N
1187	22.000	91.000	0.0000	630.00	10326.0	0.0049	AETC	N	N
1188	22.000	91.000	6.0000	372.00	10326.0	0.0043	AETC	N	N
1189	23.000	91.000	58.000	158.00	1447.0	0.0077	AETC	Y	N
1190	23.000	91.000	125.00	81.000	1447.0	0.0095	AETC	Y	N
1191	23.000	91.000	338.00	11.000	1447.0	0.0109	AETC	Y	N
1192	23.000	91.000	359.00	1.0000	1447.0	0.0115	AETC	Y	N

1193	23.000	91.000	163.00	21.000	1447.0	0.0091	AETC	Y	N
1194	23.000	91.000	35.000	147.00	1447.0	0.0079	AETC	Y	N
1195	23.000	91.000	0.0000	357.00	1447.0	0.0079	AETC	Y	N
1196	23.000	91.000	0.0000	578.00	1447.0	0.0095	AETC	Y	N
1197	23.000	91.000	0.0000	638.00	1447.0	0.0083	AETC	Y	N
1198	23.000	91.000	0.0000	703.00	1447.0	0.0091	AETC	Y	N
1199	23.000	91.000	0.0000	741.00	1447.0	0.0098	AETC	Y	N
1200	23.000	91.000	7.0000	419.00	1447.0	0.0081	AETC	Y	N
1201	24.000	91.000	400.00	3.0000	5152.0	0.0116	AETC	Y	N
1202	24.000	91.000	646.00	0.0000	5152.0	0.0154	AETC	Y	N
1203	24.000	91.000	1175.0	0.0000	5152.0	0.0227	AETC	Y	N
1204	24.000	91.000	1209.0	0.0000	5152.0	0.0224	AETC	Y	N
1205	24.000	91.000	714.00	0.0000	5152.0	0.0171	AETC	Y	N
1206	24.000	91.000	726.00	0.0000	5152.0	0.0202	AETC	Y	N
1207	24.000	91.000	573.00	1.0000	5152.0	0.0143	AETC	Y	N
1208	24.000	91.000	209.00	22.000	5152.0	0.0085	AETC	Y	N
1209	24.000	91.000	28.000	139.00	5152.0	0.0064	AETC	Y	N
1210	24.000	91.000	14.000	227.00	5152.0	0.0063	AETC	Y	N
1211	24.000	91.000	7.0000	182.00	5152.0	0.0062	AETC	Y	N
1212	24.000	91.000	194.00	48.000	5152.0	0.0066	AETC	Y	N
1213	25.000	91.000	0.0000	294.00	3446.0	0.0091	AETC	Y	N
1214	25.000	91.000	130.00	36.000	3446.0	0.0058	AETC	Y	N
1215	25.000	91.000	447.00	0.0000	3446.0	0.0126	AETC	Y	N
1216	25.000	91.000	363.00	0.0000	3446.0	0.0125	AETC	Y	N
1217	25.000	91.000	79.000	13.000	3446.0	0.0109	AETC	Y	N
1218	25.000	91.000	29.000	1.0000	3446.0	0.0090	AETC	Y	N
1219	25.000	91.000	19.000	114.00	3446.0	0.0094	AETC	Y	N
1220	25.000	91.000	153.00	29.000	3446.0	0.0094	AETC	Y	N
1221	25.000	91.000	0.0000	624.00	3446.0	0.0096	AETC	Y	N
1222	25.000	91.000	0.0000	860.00	3446.0	0.0095	AETC	Y	N
1223	25.000	91.000	0.0000	830.00	3446.0	0.0093	AETC	Y	N
1224	25.000	91.000	0.0000	0.0000	3446.0	0.0082	AETC	Y	N
1225	26.000	91.000	92.000	157.00	3725.0	0.0120	AETC	N	N
1226	26.000	91.000	229.00	12.000	3725.0	0.0127	AETC	N	N
1227	26.000	91.000	365.00	11.000	3725.0	0.0163	AETC	N	N
1228	26.000	91.000	520.00	0.0000	3725.0	0.0189	AETC	N	N
1229	26.000	91.000	322.00	4.0000	3725.0	0.0148	AETC	N	N
1230	26.000	91.000	224.00	33.000	3725.0	0.0141	AETC	N	N
1231	26.000	91.000	29.000	130.00	3725.0	0.0113	AETC	N	N
1232	26.000	91.000	0.0000	340.00	3725.0	0.0142	AETC	N	N
1233	26.000	91.000	0.0000	407.00	3725.0	0.0158	AETC	N	N
1234	26.000	91.000	0.0000	539.00	3725.0	0.0145	AETC	N	N
1235	26.000	91.000	0.0000	508.00	3725.0	0.0138	AETC	N	N
1236	26.000	91.000	1.0000	355.00	3725.0	0.0110	AETC	N	N
1237	27.000	91.000	60.000	194.00	3542.0	0.0096	AETC	Y	N
1238	27.000	91.000	144.00	95.000	3542.0	0.0098	AETC	Y	N
1239	27.000	91.000	393.00	37.000	3542.0	0.0153	AETC	Y	N
1240	27.000	91.000	466.00	0.0000	3542.0	0.0159	AETC	Y	N
1241	27.000	91.000	240.00	12.000	3542.0	0.0117	AETC	Y	N
1242	27.000	91.000	118.00	72.000	3542.0	0.0093	AETC	Y	N
1243	27.000	91.000	10.000	212.00	3542.0	0.0089	AETC	Y	N
1244	27.000	91.000	0.0000	382.00	3542.0	0.0085	AETC	Y	N
1245	27.000	91.000	0.0000	523.00	3542.0	0.0090	AETC	Y	N
1246	27.000	91.000	0.0000	583.00	3542.0	0.0102	AETC	Y	N
1247	27.000	91.000	0.0000	635.00	3542.0	0.0096	AETC	Y	N
1248	27.000	91.000	5.0000	386.00	3542.0	0.0088	AETC	Y	N
1249	28.000	91.000	152.00	20.000	1365.0	0.0109	AETC	Y	N
1250	28.000	91.000	379.00	4.0000	1365.0	0.0162	AETC	Y	N
1251	28.000	91.000	792.00	0.0000	1365.0	0.0209	AETC	Y	N
1252	28.000	91.000	792.00	0.0000	1365.0	0.0222	AETC	Y	N
1253	28.000	91.000	424.00	0.0000	1365.0	0.0166	AETC	Y	N
1254	28.000	91.000	322.00	8.0000	1365.0	0.0154	AETC	Y	N
1255	28.000	91.000	73.000	53.000	1365.0	0.0111	AETC	Y	N
1256	28.000	91.000	12.000	339.00	1365.0	0.0089	AETC	Y	N
1257	28.000	91.000	0.0000	443.00	1365.0	0.0089	AETC	Y	N
1258	28.000	91.000	0.0000	486.00	1365.0	0.0090	AETC	Y	N
1259	28.000	91.000	0.0000	462.00	1365.0	0.0087	AETC	Y	N
1260	28.000	91.000	53.000	208.00	1365.0	0.0078	AETC	Y	N
1261	29.000	91.000	122.00	95.000	5703.0	0.0069	AETC	N	N
1262	29.000	91.000	257.00	20.000	5703.0	0.0073	AETC	N	N
1263	29.000	91.000	745.00	0.0000	5703.0	0.0137	AETC	N	N

1264	29.000	91.000	770.00	0.0000	5703.0	0.0147	AETC	N N
1265	29.000	91.000	376.00	1.0000	5703.0	0.0098	AETC	N N
1266	29.000	91.000	243.00	24.000	5703.0	0.0076	AETC	N N
1267	29.000	91.000	63.000	80.000	5703.0	0.0057	AETC	N N
1268	29.000	91.000	17.000	279.00	5703.0	0.0063	AETC	N N
1269	29.000	91.000	0.0000	444.00	5703.0	0.0062	AETC	N N
1270	29.000	91.000	28.000	241.00	5703.0	0.0069	AETC	N N
1271	29.000	91.000	0.0000	503.00	5703.0	0.0066	AETC	N N
1272	29.000	91.000	28.000	241.00	5703.0	0.0052	AETC	N N
1273	30.000	91.000	9.0000	301.00	3505.0	0.0082	AETC	Y N
1274	30.000	91.000	85.000	43.000	3505.0	0.0077	AETC	Y N
1275	30.000	91.000	201.00	45.000	3505.0	0.0093	AETC	Y N
1276	30.000	91.000	278.00	3.0000	3505.0	0.0109	AETC	Y N
1277	30.000	91.000	205.00	7.0000	3505.0	0.0095	AETC	Y N
1278	30.000	91.000	145.00	47.000	3505.0	0.0079	AETC	Y N
1279	30.000	91.000	9.0000	164.00	3505.0	0.0081	AETC	Y N
1280	30.000	91.000	0.0000	349.00	3505.0	0.0090	AETC	Y N
1281	30.000	91.000	0.0000	415.00	3505.0	0.0084	AETC	Y N
1282	30.000	91.000	0.0000	491.00	3505.0	0.0089	AETC	Y N
1283	30.000	91.000	0.0000	464.00	3505.0	0.0095	AETC	Y N
1284	30.000	91.000	0.0000	403.00	3505.0	0.0096	AETC	Y N
1285	31.000	91.000	210.00	39.000	1088.0	0.0100	AETC	Y N
1286	31.000	91.000	460.00	8.0000	1088.0	0.0109	AETC	Y N
1287	31.000	91.000	986.00	0.0000	1088.0	0.0219	AETC	Y N
1288	31.000	91.000	1030.0	0.0000	1088.0	0.0211	AETC	Y N
1289	31.000	91.000	697.00	0.0000	1088.0	0.0215	AETC	Y N
1290	31.000	91.000	408.00	13.000	1088.0	0.0123	AETC	Y N
1291	31.000	91.000	225.00	35.000	1088.0	0.0090	AETC	Y N
1292	31.000	91.000	38.000	240.00	1088.0	0.0083	AETC	Y N
1293	31.000	91.000	0.0000	414.00	1088.0	0.0073	AETC	Y N
1294	31.000	91.000	0.0000	534.00	1088.0	0.0094	AETC	Y N
1295	31.000	91.000	0.0000	495.00	1088.0	0.0080	AETC	Y N
1296	31.000	91.000	53.000	228.00	1088.0	0.0081	AETC	Y N
1297	32.000	91.000	34.000	226.00	1700.0	0.0317	AETC	N N
1298	32.000	91.000	164.00	83.000	1700.0	0.0313	AETC	N N
1299	32.000	91.000	442.00	23.000	1700.0	0.0316	AETC	N N
1300	32.000	91.000	510.00	0.0000	1700.0	0.0333	AETC	N N
1301	32.000	91.000	256.00	8.0000	1700.0	0.0264	AETC	N N
1302	32.000	91.000	106.00	88.000	1700.0	0.0290	AETC	N N
1303	32.000	91.000	9.0000	210.00	1700.0	0.0262	AETC	N N
1304	32.000	91.000	0.0000	379.00	1700.0	0.0318	AETC	N N
1305	32.000	91.000	0.0000	523.00	1700.0	0.0315	AETC	N N
1306	32.000	91.000	0.0000	579.00	1700.0	0.0338	AETC	N N
1307	32.000	91.000	0.0000	631.00	1700.0	0.0329	AETC	N N
1308	32.000	91.000	6.0000	372.00	1700.0	0.0302	AETC	N N
1309	16.000	92.000	146.00	105.00	2388.0	0.0064	AETC	Y N
1310	16.000	92.000	603.00	0.0000	2388.0	0.0170	AETC	Y N
1311	16.000	92.000	624.00	0.0000	2388.0	0.0144	AETC	Y N
1312	16.000	92.000	656.00	0.0000	2388.0	0.0168	AETC	Y N
1313	16.000	92.000	383.00	0.0000	2388.0	0.0109	AETC	Y N
1314	16.000	92.000	234.00	10.000	2388.0	0.0110	AETC	Y N
1315	16.000	92.000	108.00	69.000	2388.0	0.0074	AETC	Y N
1316	16.000	92.000	38.000	184.00	2388.0	0.0064	AETC	Y N
1317	16.000	92.000	0.0000	372.00	2388.0	0.0071	AETC	Y N
1318	16.000	92.000	0.0000	525.00	2388.0	0.0073	AETC	Y N
1319	16.000	92.000	0.0000	397.00	2388.0	0.0094	AETC	Y N
1320	16.000	92.000	5.0000	300.00	2388.0	0.0067	AETC	Y N
1321	17.000	92.000	247.00	36.000	4631.0	0.0132	AETC	N N
1322	17.000	92.000	777.00	0.0000	4631.0	0.0216	AETC	N N
1323	17.000	92.000	887.00	0.0000	4631.0	0.0237	AETC	N N
1324	17.000	92.000	1065.0	0.0000	4631.0	0.0245	AETC	N N
1325	17.000	92.000	764.00	0.0000	4631.0	0.0211	AETC	N N
1326	17.000	92.000	651.00	0.0000	4631.0	0.0195	AETC	N N
1327	17.000	92.000	378.00	0.0000	4631.0	0.0167	AETC	N N
1328	17.000	92.000	138.00	91.000	4631.0	0.0129	AETC	N N
1329	17.000	92.000	21.000	223.00	4631.0	0.0118	AETC	N N
1330	17.000	92.000	0.0000	303.00	4631.0	0.0131	AETC	N N
1331	17.000	92.000	9.0000	182.00	4631.0	0.0142	AETC	N N
1332	17.000	92.000	98.000	93.000	4631.0	0.0132	AETC	N N
1333	18.000	92.000	110.00	90.000	1454.0	0.0069	AETC	Y N
1334	18.000	92.000	482.00	12.000	1454.0	0.0087	AETC	Y N

1335	18.000	92.000	303.00	52.000	1454.0	0.0153	AETC	Y	N
1336	18.000	92.000	681.00	0.0000	1454.0	0.0184	AETC	Y	N
1337	18.000	92.000	413.00	0.0000	1454.0	0.0127	AETC	Y	N
1338	18.000	92.000	332.00	7.0000	1454.0	0.0114	AETC	Y	N
1339	18.000	92.000	70.000	153.00	1454.0	0.0089	AETC	Y	N
1340	18.000	92.000	27.000	140.00	1454.0	0.0078	AETC	Y	N
1341	18.000	92.000	0.0000	301.00	1454.0	0.0085	AETC	Y	N
1342	18.000	92.000	0.0000	479.00	1454.0	0.0079	AETC	Y	N
1343	18.000	92.000	0.0000	352.00	1454.0	0.0077	AETC	Y	N
1344	18.000	92.000	6.0000	257.00	1454.0	0.0095	AETC	Y	N
1345	19.000	92.000	90.000	123.00	1774.0	0.0081	AETC	N	N
1346	19.000	92.000	443.00	0.0000	1774.0	0.0125	AETC	N	N
1347	19.000	92.000	482.00	2.0000	1774.0	0.0132	AETC	N	N
1348	19.000	92.000	592.00	0.0000	1774.0	0.0129	AETC	N	N
1349	19.000	92.000	344.00	0.0000	1774.0	0.0122	AETC	N	N
1350	19.000	92.000	199.00	3.0000	1774.0	0.0102	AETC	N	N
1351	19.000	92.000	88.000	86.000	1774.0	0.0084	AETC	N	N
1352	19.000	92.000	20.000	195.00	1774.0	0.0082	AETC	N	N
1353	19.000	92.000	0.0000	432.00	1774.0	0.0086	AETC	N	N
1354	19.000	92.000	0.0000	567.00	1774.0	0.0089	AETC	N	N
1355	19.000	92.000	0.0000	450.00	1774.0	0.0066	AETC	N	N
1356	19.000	92.000	0.0000	386.00	1774.0	0.0106	AETC	N	N
1357	20.000	92.000	69.000	119.00	1717.0	0.0092	AETC	N	N
1358	20.000	92.000	387.00	15.000	1717.0	0.0122	AETC	N	N
1359	20.000	92.000	447.00	18.000	1717.0	0.0139	AETC	N	N
1360	20.000	92.000	588.00	0.0000	1717.0	0.0154	AETC	N	N
1361	20.000	92.000	324.00	5.0000	1717.0	0.0123	AETC	N	N
1362	20.000	92.000	260.00	10.000	1717.0	0.0119	AETC	N	N
1363	20.000	92.000	126.00	60.000	1717.0	0.0095	AETC	N	N
1364	20.000	92.000	25.000	169.00	1717.0	0.0072	AETC	N	N
1365	20.000	92.000	0.0000	351.00	1717.0	0.0087	AETC	N	N
1366	20.000	92.000	0.0000	517.00	1717.0	0.0114	AETC	N	N
1367	20.000	92.000	0.0000	422.00	1717.0	0.0078	AETC	N	N
1368	20.000	92.000	1.0000	354.00	1717.0	0.0088	AETC	N	N
1369	21.000	92.000	25.000	214.00	6943.0	0.0105	AETC	N	N
1370	21.000	92.000	306.00	24.000	6943.0	0.0117	AETC	N	N
1371	21.000	92.000	299.00	10.000	6943.0	0.0106	AETC	N	N
1372	21.000	92.000	436.00	0.0000	6943.0	0.0124	AETC	N	N
1373	21.000	92.000	217.00	3.0000	6943.0	0.0104	AETC	N	N
1374	21.000	92.000	159.00	24.000	6943.0	0.0104	AETC	N	N
1375	21.000	92.000	44.000	131.00	6943.0	0.0096	AETC	N	N
1376	21.000	92.000	9.0000	272.00	6943.0	0.0097	AETC	N	N
1377	21.000	92.000	0.0000	447.00	6943.0	0.0095	AETC	N	N
1378	21.000	92.000	0.0000	556.00	6943.0	0.0105	AETC	N	N
1379	21.000	92.000	0.0000	464.00	6943.0	0.0103	AETC	N	N
1380	21.000	92.000	0.0000	421.00	6943.0	0.0103	AETC	N	N
1381	22.000	92.000	29.000	292.00	10322.0	0.0040	AETC	N	N
1382	22.000	92.000	269.00	50.000	10322.0	0.0037	AETC	N	N
1383	22.000	92.000	309.00	16.000	10322.0	0.0051	AETC	N	N
1384	22.000	92.000	449.00	0.0000	10322.0	0.0053	AETC	N	N
1385	22.000	92.000	201.00	12.000	10322.0	0.0040	AETC	N	N
1386	22.000	92.000	108.00	39.000	10322.0	0.0034	AETC	N	N
1387	22.000	92.000	37.000	123.00	10322.0	0.0032	AETC	N	N
1388	22.000	92.000	4.0000	252.00	10322.0	0.0043	AETC	N	N
1389	22.000	92.000	0.0000	501.00	10322.0	0.0048	AETC	N	N
1390	22.000	92.000	0.0000	592.00	10322.0	0.0050	AETC	N	N
1391	22.000	92.000	0.0000	504.00	10322.0	0.0045	AETC	N	N
1392	22.000	92.000	0.0000	463.00	10322.0	0.0045	AETC	N	N
1393	23.000	92.000	22.000	319.00	1441.0	0.0086	AETC	Y	N
1394	23.000	92.000	164.00	41.000	1441.0	0.0094	AETC	Y	N
1395	23.000	92.000	245.00	19.000	1441.0	0.0096	AETC	Y	N
1396	23.000	92.000	352.00	0.0000	1441.0	0.0116	AETC	Y	N
1397	23.000	92.000	151.00	17.000	1441.0	0.0091	AETC	Y	N
1398	23.000	92.000	52.000	106.00	1441.0	0.0089	AETC	Y	N
1399	23.000	92.000	27.000	209.00	1441.0	0.0079	AETC	Y	N
1400	23.000	92.000	0.0000	350.00	1441.0	0.0078	AETC	Y	N
1401	23.000	92.000	0.0000	551.00	1441.0	0.0085	AETC	Y	N
1402	23.000	92.000	0.0000	564.00	1441.0	0.0094	AETC	Y	N
1403	23.000	92.000	0.0000	517.00	1441.0	0.0083	AETC	Y	N
1404	23.000	92.000	0.0000	458.00	1441.0	0.0082	AETC	Y	N
1405	24.000	92.000	475.00	8.0000	5152.0	0.0129	AETC	N	N

1406	24.000	92.000	940.00	0.0000	5152.0	0.0188	AETC	N N
1407	24.000	92.000	1045.0	0.0000	5152.0	0.0203	AETC	N N
1408	24.000	92.000	1097.0	0.0000	5152.0	0.0215	AETC	N N
1409	24.000	92.000	769.00	0.0000	5152.0	0.0168	AETC	N N
1410	24.000	92.000	720.00	0.0000	5152.0	0.0156	AETC	N N
1411	24.000	92.000	401.00	7.0000	5152.0	0.0117	AETC	N N
1412	24.000	92.000	201.00	19.000	5152.0	0.0067	AETC	N N
1413	24.000	92.000	74.000	46.000	5152.0	0.0060	AETC	N N
1414	24.000	92.000	18.000	153.00	5152.0	0.0064	AETC	N N
1415	24.000	92.000	50.000	132.00	5152.0	0.0063	AETC	N N
1416	24.000	92.000	78.000	61.000	5152.0	0.0060	AETC	N N
1417	25.000	92.000	39.000	414.00	3446.0	0.0082	AETC	Y N
1418	25.000	92.000	163.00	39.000	3446.0	0.0079	AETC	Y N
1419	25.000	92.000	296.00	0.0000	3446.0	0.0094	AETC	Y N
1420	25.000	92.000	353.00	0.0000	3446.0	0.0104	AETC	Y N
1421	25.000	92.000	152.00	2.0000	3446.0	0.0097	AETC	Y N
1422	25.000	92.000	120.00	6.0000	3446.0	0.0085	AETC	Y N
1423	25.000	92.000	18.000	114.00	3446.0	0.0084	AETC	Y N
1424	25.000	92.000	0.0000	510.00	3446.0	0.0088	AETC	Y N
1425	25.000	92.000	0.0000	637.00	3446.0	0.0088	AETC	Y N
1426	25.000	92.000	0.0000	789.00	3446.0	0.0094	AETC	Y N
1427	25.000	92.000	0.0000	805.00	3446.0	0.0086	AETC	Y N
1428	25.000	92.000	18.000	114.00	3446.0	0.0090	AETC	Y N
1429	26.000	92.000	69.000	119.00	3840.0	0.0103	AETC	N N
1430	26.000	92.000	387.00	15.000	3840.0	0.0146	AETC	N N
1431	26.000	92.000	447.00	18.000	3840.0	0.0172	AETC	N N
1432	26.000	92.000	588.00	0.0000	3840.0	0.0191	AETC	N N
1433	26.000	92.000	324.00	5.0000	3840.0	0.0149	AETC	N N
1434	26.000	92.000	260.00	10.000	3840.0	0.0144	AETC	N N
1435	26.000	92.000	126.00	60.000	3840.0	0.0120	AETC	N N
1436	26.000	92.000	25.000	169.00	3840.0	0.0104	AETC	N N
1437	26.000	92.000	0.0000	351.00	3840.0	0.0123	AETC	N N
1438	26.000	92.000	0.0000	517.00	3840.0	0.0135	AETC	N N
1439	26.000	92.000	0.0000	422.00	3840.0	0.0124	AETC	N N
1440	26.000	92.000	1.0000	354.00	3840.0	0.0111	AETC	N N
1441	27.000	92.000	34.000	293.00	3492.0	0.0091	AETC	Y N
1442	27.000	92.000	278.00	54.000	3492.0	0.0114	AETC	Y N
1443	27.000	92.000	314.00	24.000	3492.0	0.0133	AETC	Y N
1444	27.000	92.000	443.00	0.0000	3492.0	0.0152	AETC	Y N
1445	27.000	92.000	192.00	24.000	3492.0	0.0104	AETC	Y N
1446	27.000	92.000	111.00	49.000	3492.0	0.0100	AETC	Y N
1447	27.000	92.000	42.000	130.00	3492.0	0.0084	AETC	Y N
1448	27.000	92.000	9.0000	266.00	3492.0	0.0083	AETC	Y N
1449	27.000	92.000	0.0000	513.00	3492.0	0.0089	AETC	Y N
1450	27.000	92.000	0.0000	605.00	3492.0	0.0098	AETC	Y N
1451	27.000	92.000	0.0000	518.00	3492.0	0.0098	AETC	Y N
1452	27.000	92.000	0.0000	483.00	3492.0	0.0087	AETC	Y N
1453	28.000	92.000	144.00	86.000	1375.0	0.0118	AETC	Y N
1454	28.000	92.000	537.00	0.0000	1375.0	0.0196	AETC	Y N
1455	28.000	92.000	629.00	0.0000	1375.0	0.0207	AETC	Y N
1456	28.000	92.000	736.00	0.0000	1375.0	0.0223	AETC	Y N
1457	28.000	92.000	436.00	0.0000	1375.0	0.0172	AETC	Y N
1458	28.000	92.000	278.00	0.0000	1375.0	0.0151	AETC	Y N
1459	28.000	92.000	101.00	93.000	1375.0	0.0110	AETC	Y N
1460	28.000	92.000	29.000	161.00	1375.0	0.0092	AETC	Y N
1461	28.000	92.000	0.0000	368.00	1375.0	0.0084	AETC	Y N
1462	28.000	92.000	0.0000	515.00	1375.0	0.0094	AETC	Y N
1463	28.000	92.000	0.0000	403.00	1375.0	0.0092	AETC	Y N
1464	28.000	92.000	3.0000	278.00	1375.0	0.0079	AETC	Y N
1465	29.000	92.000	121.00	134.00	5703.0	0.0072	AETC	N N
1466	29.000	92.000	510.00	3.0000	5703.0	0.0105	AETC	N N
1467	29.000	92.000	569.00	1.0000	5703.0	0.0103	AETC	N N
1468	29.000	92.000	682.00	0.0000	5703.0	0.0117	AETC	N N
1469	29.000	92.000	426.00	0.0000	5703.0	0.0092	AETC	N N
1470	29.000	92.000	299.00	7.0000	5703.0	0.0059	AETC	N N
1471	29.000	92.000	105.00	68.000	5703.0	0.0064	AETC	N N
1472	29.000	92.000	37.000	174.00	5703.0	0.0053	AETC	N N
1473	29.000	92.000	0.0000	405.00	5703.0	0.0058	AETC	N N
1474	29.000	92.000	0.0000	569.00	5703.0	0.0058	AETC	N N
1475	29.000	92.000	0.0000	435.00	5703.0	0.0059	AETC	N N
1476	29.000	92.000	2.0000	319.00	5703.0	0.0050	AETC	N N

1477	30.000	92.000	22.000	168.00	3505.0	0.0081	AETC	Y	N
1478	30.000	92.000	271.00	32.000	3505.0	0.0096	AETC	Y	N
1479	30.000	92.000	283.00	23.000	3505.0	0.0102	AETC	Y	N
1480	30.000	92.000	425.00	0.0000	3505.0	0.0119	AETC	Y	N
1481	30.000	92.000	239.00	6.0000	3505.0	0.0100	AETC	Y	N
1482	30.000	92.000	191.00	11.000	3505.0	0.0092	AETC	Y	N
1483	30.000	92.000	85.000	68.000	3505.0	0.0082	AETC	Y	N
1484	30.000	92.000	22.000	185.00	3505.0	0.0076	AETC	Y	N
1485	30.000	92.000	0.0000	405.00	3505.0	0.0083	AETC	Y	N
1486	30.000	92.000	0.0000	532.00	3505.0	0.0096	AETC	Y	N
1487	30.000	92.000	0.0000	452.00	3505.0	0.0097	AETC	Y	N
1488	30.000	92.000	0.0000	428.00	3505.0	0.0091	AETC	Y	N
1489	31.000	92.000	203.00	76.000	1088.0	0.0090	AETC	Y	N
1490	31.000	92.000	701.00	0.0000	1088.0	0.0170	AETC	Y	N
1491	31.000	92.000	683.00	0.0000	1088.0	0.0156	AETC	Y	N
1492	31.000	92.000	733.00	0.0000	1088.0	0.0179	AETC	Y	N
1493	31.000	92.000	525.00	0.0000	1088.0	0.0137	AETC	Y	N
1494	31.000	92.000	405.00	0.0000	1088.0	0.0131	AETC	Y	N
1495	31.000	92.000	199.00	22.000	1088.0	0.0095	AETC	Y	N
1496	31.000	92.000	0.0000	88.000	1088.0	0.0073	AETC	Y	N
1497	31.000	92.000	0.0000	240.00	1088.0	0.0077	AETC	Y	N
1498	31.000	92.000	0.0000	476.00	1088.0	0.0087	AETC	Y	N
1499	31.000	92.000	0.0000	282.00	1088.0	0.0079	AETC	Y	N
1500	31.000	92.000	0.0000	218.00	1088.0	0.0078	AETC	Y	N
1501	32.000	92.000	29.000	292.00	1704.0	0.0338	AETC	N	N
1502	32.000	92.000	269.00	50.000	1704.0	0.0330	AETC	N	N
1503	32.000	92.000	309.00	16.000	1704.0	0.0350	AETC	N	N
1504	32.000	92.000	449.00	0.0000	1704.0	0.0370	AETC	N	N
1505	32.000	92.000	201.00	12.000	1704.0	0.0304	AETC	N	N
1506	32.000	92.000	108.00	39.000	1704.0	0.0353	AETC	N	N
1507	32.000	92.000	37.000	123.00	1704.0	0.0339	AETC	N	N
1508	32.000	92.000	4.0000	252.00	1704.0	0.0343	AETC	N	N
1509	32.000	92.000	0.0000	501.00	1704.0	0.0349	AETC	N	N
1510	32.000	92.000	0.0000	592.00	1704.0	0.0358	AETC	N	N
1511	32.000	92.000	0.0000	505.00	1704.0	0.0357	AETC	N	N
1512	32.000	92.000	0.0000	225.00	1704.0	0.0338	AETC	N	N
1513	16.000	93.000	79.000	65.000	2146.0	0.0083	AETC	Y	N
1514	16.000	93.000	524.00	11.000	2146.0	0.0160	AETC	Y	N
1515	16.000	93.000	719.00	0.0000	2146.0	0.0187	AETC	Y	N
1516	16.000	93.000	855.00	0.0000	2146.0	0.0260	AETC	Y	N
1517	16.000	93.000	653.00	0.0000	2146.0	0.0195	AETC	Y	N
1518	16.000	93.000	424.00	6.0000	2146.0	0.0170	AETC	Y	N
1519	16.000	93.000	207.00	29.000	2146.0	0.0120	AETC	Y	N
1520	16.000	93.000	40.000	164.00	2146.0	0.0073	AETC	Y	N
1521	16.000	93.000	0.0000	443.00	2146.0	0.0079	AETC	Y	N
1522	16.000	93.000	0.0000	649.00	2146.0	0.0088	AETC	Y	N
1523	16.000	93.000	0.0000	520.00	2146.0	0.0087	AETC	Y	N
1524	16.000	93.000	20.000	237.00	2146.0	0.0072	AETC	Y	N
1525	17.000	93.000	270.00	13.000	4631.0	0.0127	AETC	N	N
1526	17.000	93.000	656.00	0.0000	4631.0	0.0180	AETC	N	N
1527	17.000	93.000	988.00	0.0000	4631.0	0.0220	AETC	N	N
1528	17.000	93.000	1082.0	0.0000	4631.0	0.0226	AETC	N	N
1529	17.000	93.000	1033.0	0.0000	4631.0	0.0277	AETC	N	N
1530	17.000	93.000	837.00	0.0000	4631.0	0.0244	AETC	N	N
1531	17.000	93.000	433.00	0.0000	4631.0	0.0172	AETC	N	N
1532	17.000	93.000	64.000	0.0000	4631.0	0.0083	AETC	N	N
1533	17.000	93.000	30.000	286.00	4631.0	0.0061	AETC	N	N
1534	17.000	93.000	0.0000	408.00	4631.0	0.0058	AETC	N	N
1535	17.000	93.000	0.0000	376.00	4631.0	0.0053	AETC	N	N
1536	17.000	93.000	11.000	127.00	4631.0	0.0050	AETC	N	N
1537	18.000	93.000	102.00	19.000	1467.0	0.0080	AETC	Y	N
1538	18.000	93.000	413.00	5.0000	1467.0	0.0105	AETC	Y	N
1539	18.000	93.000	636.00	0.0000	1467.0	0.0162	AETC	Y	N
1540	18.000	93.000	605.00	0.0000	1467.0	0.0128	AETC	Y	N
1541	18.000	93.000	579.00	0.0000	1467.0	0.0116	AETC	Y	N
1542	18.000	93.000	450.00	3.0000	1467.0	0.0169	AETC	Y	N
1543	18.000	93.000	205.00	21.000	1467.0	0.0082	AETC	Y	N
1544	18.000	93.000	19.000	152.00	1467.0	0.0055	AETC	Y	N
1545	18.000	93.000	0.0000	301.00	1467.0	0.0090	AETC	Y	N
1546	18.000	93.000	0.0000	610.00	1467.0	0.0080	AETC	Y	N
1547	18.000	93.000	0.0000	488.00	1467.0	0.0092	AETC	Y	N

1548	18.000	93.000	20.000	350.00	1467.0	0.0094	AETC	Y	N
1549	19.000	93.000	27.000	134.00	1802.0	0.0078	AETC	N	N
1550	19.000	93.000	370.00	16.000	1802.0	0.0100	AETC	N	N
1551	19.000	93.000	473.00	3.0000	1802.0	0.0130	AETC	N	N
1552	19.000	93.000	619.00	0.0000	1802.0	0.0142	AETC	N	N
1553	19.000	93.000	436.00	0.0000	1802.0	0.0135	AETC	N	N
1554	19.000	93.000	273.00	28.000	1802.0	0.0110	AETC	N	N
1555	19.000	93.000	89.000	131.00	1802.0	0.0069	AETC	N	N
1556	19.000	93.000	4.0000	239.00	1802.0	0.0085	AETC	N	N
1557	19.000	93.000	0.0000	494.00	1802.0	0.0086	AETC	N	N
1558	19.000	93.000	0.0000	653.00	1802.0	0.0092	AETC	N	N
1559	19.000	93.000	0.0000	608.00	1802.0	0.0094	AETC	N	N
1560	19.000	93.000	7.0000	283.00	1802.0	0.0084	AETC	N	N
1561	20.000	93.000	58.000	42.000	1627.0	0.0098	AETC	N	N
1562	20.000	93.000	323.00	8.0000	1627.0	0.0110	AETC	N	N
1563	20.000	93.000	474.00	3.0000	1627.0	0.0134	AETC	N	N
1564	20.000	93.000	421.00	0.0000	1627.0	0.0130	AETC	N	N
1565	20.000	93.000	453.00	2.0000	1627.0	0.0127	AETC	N	N
1566	20.000	93.000	339.00	16.000	1627.0	0.0119	AETC	N	N
1567	20.000	93.000	141.00	15.000	1627.0	0.0108	AETC	N	N
1568	20.000	93.000	8.0000	215.00	1627.0	0.0101	AETC	N	N
1569	20.000	93.000	0.0000	468.00	1627.0	0.0104	AETC	N	N
1570	20.000	93.000	0.0000	615.00	1627.0	0.0118	AETC	N	N
1571	20.000	93.000	0.0000	548.00	1627.0	0.0110	AETC	N	N
1572	20.000	93.000	2.0000	377.00	1627.0	0.0113	AETC	N	N
1573	21.000	93.000	7.0000	127.00	6983.0	0.0097	AETC	N	N
1574	21.000	93.000	243.00	22.000	6983.0	0.0121	AETC	N	N
1575	21.000	93.000	264.00	2.0000	6983.0	0.0119	AETC	N	N
1576	21.000	93.000	234.00	5.0000	6983.0	0.0119	AETC	N	N
1577	21.000	93.000	300.00	0.0000	6983.0	0.0096	AETC	N	N
1578	21.000	93.000	253.00	16.000	6983.0	0.0108	AETC	N	N
1579	21.000	93.000	82.000	60.000	6983.0	0.0094	AETC	N	N
1580	21.000	93.000	0.0000	251.00	6983.0	0.0098	AETC	N	N
1581	21.000	93.000	0.0000	488.00	6983.0	0.0101	AETC	N	N
1582	21.000	93.000	0.0000	547.00	6983.0	0.0106	AETC	N	N
1583	21.000	93.000	0.0000	570.00	6983.0	0.0097	AETC	N	N
1584	21.000	93.000	0.0000	429.00	6983.0	0.0110	AETC	N	N
1585	22.000	93.000	1.0000	225.00	8507.0	0.0046	AETC	N	N
1586	22.000	93.000	275.00	29.000	8507.0	0.0045	AETC	N	N
1587	22.000	93.000	307.00	24.000	8507.0	0.0070	AETC	N	N
1588	22.000	93.000	431.00	1.0000	8507.0	0.0058	AETC	N	N
1589	22.000	93.000	270.00	9.0000	8507.0	0.0045	AETC	N	N
1590	22.000	93.000	158.00	34.000	8507.0	0.0050	AETC	N	N
1591	22.000	93.000	43.000	98.000	8507.0	0.0045	AETC	N	N
1592	22.000	93.000	0.0000	244.00	8507.0	0.0052	AETC	N	N
1593	22.000	93.000	0.0000	448.00	8507.0	0.0058	AETC	N	N
1594	22.000	93.000	0.0000	574.00	8507.0	0.0062	AETC	N	N
1595	22.000	93.000	0.0000	622.00	8507.0	0.0062	AETC	N	N
1596	22.000	93.000	0.0000	471.00	8507.0	0.0054	AETC	N	N
1597	23.000	93.000	0.0000	228.00	1498.0	0.0076	AETC	Y	N
1598	23.000	93.000	272.00	23.000	1498.0	0.0083	AETC	Y	N
1599	23.000	93.000	338.00	2.0000	1498.0	0.0100	AETC	Y	N
1600	23.000	93.000	448.00	0.0000	1498.0	0.0099	AETC	Y	N
1601	23.000	93.000	266.00	1.0000	1498.0	0.0086	AETC	Y	N
1602	23.000	93.000	132.00	61.000	1498.0	0.0086	AETC	Y	N
1603	23.000	93.000	12.000	164.00	1498.0	0.0075	AETC	Y	N
1604	23.000	93.000	0.0000	351.00	1498.0	0.0077	AETC	Y	N
1605	23.000	93.000	0.0000	489.00	1498.0	0.0089	AETC	Y	N
1606	23.000	93.000	0.0000	645.00	1498.0	0.0091	AETC	Y	N
1607	23.000	93.000	0.0000	676.00	1498.0	0.0094	AETC	Y	N
1608	23.000	93.000	0.0000	432.00	1498.0	0.0076	AETC	Y	N
1609	24.000	93.000	365.00	3.0000	5152.0	0.0137	AETC	N	N
1610	24.000	93.000	957.00	0.0000	5152.0	0.0227	AETC	N	N
1611	24.000	93.000	1198.0	0.0000	5152.0	0.0260	AETC	N	N
1612	24.000	93.000	1154.0	0.0000	5152.0	0.0245	AETC	N	N
1613	24.000	93.000	1030.0	0.0000	5152.0	0.0227	AETC	N	N
1614	24.000	93.000	730.00	0.0000	5152.0	0.0199	AETC	N	N
1615	24.000	93.000	547.00	0.0000	5152.0	0.0161	AETC	N	N
1616	24.000	93.000	234.00	7.0000	5152.0	0.0105	AETC	N	N
1617	24.000	93.000	94.000	113.00	5152.0	0.0078	AETC	N	N
1618	24.000	93.000	8.0000	232.00	5152.0	0.0081	AETC	N	N

1619	24.000	93.000	33.000	149.00	5152.0	0.0075	AETC	N	N
1620	24.000	93.000	188.00	28.000	5152.0	0.0079	AETC	N	N
1621	25.000	93.000	0.0000	287.00	3042.0	0.0079	AETC	Y	N
1622	25.000	93.000	200.00	2.0000	3042.0	0.0085	AETC	Y	N
1623	25.000	93.000	410.00	0.0000	3042.0	0.0118	AETC	Y	N
1624	25.000	93.000	296.00	0.0000	3042.0	0.0085	AETC	Y	N
1625	25.000	93.000	218.00	0.0000	3042.0	0.0108	AETC	Y	N
1626	25.000	93.000	92.000	31.000	3042.0	0.0085	AETC	Y	N
1627	25.000	93.000	2.0000	188.00	3042.0	0.0086	AETC	Y	N
1628	25.000	93.000	0.0000	510.00	3042.0	0.0092	AETC	Y	N
1629	25.000	93.000	0.0000	649.00	3042.0	0.0108	AETC	Y	N
1630	25.000	93.000	11.000	804.00	3042.0	0.0101	AETC	Y	N
1631	25.000	93.000	0.0000	777.00	3042.0	0.0102	AETC	Y	N
1632	25.000	93.000	0.0000	603.00	3042.0	0.0107	AETC	Y	N
1633	26.000	93.000	58.000	42.000	3931.0	0.0099	AETC	N	N
1634	26.000	93.000	323.00	8.0000	3931.0	0.0136	AETC	N	N
1635	26.000	93.000	474.00	3.0000	3931.0	0.0207	AETC	N	N
1636	26.000	93.000	421.00	0.0000	3931.0	0.0171	AETC	N	N
1637	26.000	93.000	453.00	2.0000	3931.0	0.0163	AETC	N	N
1638	26.000	93.000	339.00	16.000	3931.0	0.0167	AETC	N	N
1639	26.000	93.000	141.00	15.000	3931.0	0.0124	AETC	N	N
1640	26.000	93.000	8.0000	215.00	3931.0	0.0109	AETC	N	N
1641	26.000	93.000	0.0000	468.00	3931.0	0.0116	AETC	N	N
1642	26.000	93.000	0.0000	615.00	3931.0	0.0124	AETC	N	N
1643	26.000	93.000	0.0000	548.00	3931.0	0.0123	AETC	N	N
1644	26.000	93.000	2.0000	377.00	3931.0	0.0107	AETC	N	N
1645	27.000	93.000	3.0000	246.00	3487.0	0.0082	AETC	Y	N
1646	27.000	93.000	280.00	38.000	3487.0	0.0119	AETC	Y	N
1647	27.000	93.000	305.00	28.000	3487.0	0.0124	AETC	Y	N
1648	27.000	93.000	443.00	0.0000	3487.0	0.0124	AETC	Y	N
1649	27.000	93.000	286.00	7.0000	3487.0	0.0138	AETC	Y	N
1650	27.000	93.000	171.00	38.000	3487.0	0.0114	AETC	Y	N
1651	27.000	93.000	63.000	99.000	3487.0	0.0108	AETC	Y	N
1652	27.000	93.000	0.0000	261.00	3487.0	0.0084	AETC	Y	N
1653	27.000	93.000	0.0000	473.00	3487.0	0.0081	AETC	Y	N
1654	27.000	93.000	0.0000	637.00	3487.0	0.0096	AETC	Y	N
1655	27.000	93.000	0.0000	662.00	3487.0	0.0088	AETC	Y	N
1656	27.000	93.000	0.0000	486.00	3487.0	0.0090	AETC	Y	N
1657	28.000	93.000	85.000	62.000	1375.0	0.0096	AETC	Y	N
1658	28.000	93.000	538.00	3.0000	1375.0	0.0173	AETC	Y	N
1659	28.000	93.000	981.00	0.0000	1375.0	0.0228	AETC	Y	N
1660	28.000	93.000	813.00	0.0000	1375.0	0.0198	AETC	Y	N
1661	28.000	93.000	602.00	0.0000	1375.0	0.0204	AETC	Y	N
1662	28.000	93.000	400.00	0.0000	1375.0	0.0173	AETC	Y	N
1663	28.000	93.000	167.00	54.000	1375.0	0.0130	AETC	Y	N
1664	28.000	93.000	34.000	204.00	1375.0	0.0087	AETC	Y	N
1665	28.000	93.000	0.0000	457.00	1375.0	0.0085	AETC	Y	N
1666	28.000	93.000	0.0000	590.00	1375.0	0.0102	AETC	Y	N
1667	28.000	93.000	1.0000	503.00	1375.0	0.0088	AETC	Y	N
1668	28.000	93.000	10.000	264.00	1375.0	0.0087	AETC	Y	N
1669	29.000	93.000	742.00	0.0000	5850.0	0.0056	AETC	N	N
1670	29.000	93.000	464.00	11.000	5850.0	0.0080	AETC	N	N
1671	29.000	93.000	625.00	5.0000	5850.0	0.0111	AETC	N	N
1672	29.000	93.000	742.00	0.0000	5850.0	0.0123	AETC	N	N
1673	29.000	93.000	601.00	0.0000	5850.0	0.0114	AETC	N	N
1674	29.000	93.000	392.00	12.000	5850.0	0.0102	AETC	N	N
1675	29.000	93.000	251.00	38.000	5850.0	0.0067	AETC	N	N
1676	29.000	93.000	0.0000	130.00	5850.0	0.0048	AETC	N	N
1677	29.000	93.000	0.0000	411.00	5850.0	0.0061	AETC	N	N
1678	29.000	93.000	0.0000	654.00	5850.0	0.0063	AETC	N	N
1679	29.000	93.000	0.0000	609.00	5850.0	0.0067	AETC	N	N
1680	29.000	93.000	123.00	88.000	5850.0	0.0046	AETC	N	N
1681	30.000	93.000	8.0000	102.00	3589.0	0.0074	AETC	Y	N
1682	30.000	93.000	172.00	81.000	3589.0	0.0083	AETC	Y	N
1683	30.000	93.000	277.00	3.0000	3589.0	0.0098	AETC	Y	N
1684	30.000	93.000	277.00	2.0000	3589.0	0.0088	AETC	Y	N
1685	30.000	93.000	369.00	0.0000	3589.0	0.0096	AETC	Y	N
1686	30.000	93.000	281.00	2.0000	3589.0	0.0093	AETC	Y	N
1687	30.000	93.000	141.00	15.000	3589.0	0.0080	AETC	Y	N
1688	30.000	93.000	0.0000	194.00	3589.0	0.0067	AETC	Y	N
1689	30.000	93.000	0.0000	421.00	3589.0	0.0093	AETC	Y	N

1690	30.000	93.000	0.0000	582.00	3589.0	0.0077	AETC	Y	N
1691	30.000	93.000	0.0000	579.00	3589.0	0.0103	AETC	Y	N
1692	30.000	93.000	0.0000	473.00	3589.0	0.0890	AETC	Y	N
1693	31.000	93.000	114.00	40.000	1098.0	0.0087	AETC	Y	N
1694	31.000	93.000	647.00	0.0000	1098.0	0.0148	AETC	Y	N
1695	31.000	93.000	886.00	0.0000	1098.0	0.0194	AETC	Y	N
1696	31.000	93.000	986.00	0.0000	1098.0	0.0200	AETC	Y	N
1697	31.000	93.000	810.00	0.0000	1098.0	0.0168	AETC	Y	N
1698	31.000	93.000	590.00	2.0000	1098.0	0.0155	AETC	Y	N
1699	31.000	93.000	317.00	0.0000	1098.0	0.0111	AETC	Y	N
1700	31.000	93.000	14.000	82.000	1098.0	0.0072	AETC	Y	N
1701	31.000	93.000	0.0000	360.00	1098.0	0.0083	AETC	Y	N
1702	31.000	93.000	0.0000	618.00	1098.0	0.0084	AETC	Y	N
1703	31.000	93.000	0.0000	553.00	1098.0	0.0091	AETC	Y	N
1704	31.000	93.000	0.0000	151.00	1098.0	0.0068	AETC	Y	N
1705	32.000	93.000	1.0000	225.00	1704.0	0.0348	AETC	N	N
1706	32.000	93.000	275.00	29.000	1704.0	0.0328	AETC	N	N
1707	32.000	93.000	307.00	24.000	1704.0	0.0347	AETC	N	N
1708	32.000	93.000	431.00	1.0000	1704.0	0.0383	AETC	N	N
1709	32.000	93.000	270.00	9.0000	1704.0	0.0361	AETC	N	N
1710	32.000	93.000	158.00	34.000	1704.0	0.0345	AETC	N	N
1711	32.000	93.000	43.000	98.000	1704.0	0.0355	AETC	N	N
1712	32.000	93.000	0.0000	244.00	1704.0	0.0365	AETC	N	N
1713	32.000	93.000	0.0000	448.00	1704.0	0.0321	AETC	N	N
1714	32.000	93.000	0.0000	574.00	1704.0	0.0398	AETC	N	N
1715	32.000	93.000	0.0000	622.00	1704.0	0.0343	AETC	N	N
1716	32.000	93.000	0.0000	471.00	1704.0	0.0355	AETC	N	N
1717	16.000	94.000	259.00	55.000	2243.0	0.0080	AETC	Y	N
1718	16.000	94.000	548.00	0.0000	2243.0	0.0155	AETC	Y	N
1719	16.000	94.000	651.00	0.0000	2243.0	0.0169	AETC	Y	N
1720	16.000	94.000	825.00	0.0000	2243.0	0.0224	AETC	Y	N
1721	16.000	94.000	704.00	0.0000	2243.0	0.0200	AETC	Y	N
1722	16.000	94.000	380.00	24.000	2243.0	0.0147	AETC	Y	N
1723	16.000	94.000	153.00	24.000	2243.0	0.0089	AETC	Y	N
1724	16.000	94.000	45.000	177.00	2243.0	0.0075	AETC	Y	N
1725	16.000	94.000	0.0000	562.00	2243.0	0.0081	AETC	Y	N
1726	16.000	94.000	0.0000	582.00	2243.0	0.0081	AETC	Y	N
1727	16.000	94.000	0.0000	515.00	2243.0	0.0082	AETC	Y	N
1728	16.000	94.000	17.000	351.00	2243.0	0.0074	AETC	Y	N
1729	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1730	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1731	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1732	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1733	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1734	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1735	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1736	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1737	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1738	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1739	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1740	17.000	94.000	0.0000	0.0000	0.0000	0.0000	AETC	N	N
1741	18.000	94.000	138.00	94.000	1434.0	0.0059	AETC	Y	N
1742	18.000	94.000	388.00	20.000	1434.0	0.0103	AETC	Y	N
1743	18.000	94.000	540.00	0.0000	1434.0	0.0136	AETC	Y	N
1744	18.000	94.000	716.00	0.0000	1434.0	0.0164	AETC	Y	N
1745	18.000	94.000	384.00	6.0000	1434.0	0.0127	AETC	Y	N
1746	18.000	94.000	200.00	70.000	1434.0	0.0093	AETC	Y	N
1747	18.000	94.000	63.000	182.00	1434.0	0.0081	AETC	Y	N
1748	18.000	94.000	13.000	220.00	1434.0	0.0079	AETC	Y	N
1749	18.000	94.000	0.0000	441.00	1434.0	0.0064	AETC	Y	N
1750	18.000	94.000	0.0000	478.00	1434.0	0.0075	AETC	Y	N
1751	18.000	94.000	0.0000	488.00	1434.0	0.0096	AETC	Y	N
1752	18.000	94.000	7.0000	280.00	1434.0	0.0074	AETC	Y	N
1753	19.000	94.000	159.00	138.00	1803.0	0.0084	AETC	N	N
1754	19.000	94.000	401.00	14.000	1803.0	0.0104	AETC	N	N
1755	19.000	94.000	457.00	0.0000	1803.0	0.0114	AETC	N	N
1756	19.000	94.000	554.00	0.0000	1803.0	0.0131	AETC	N	N
1757	19.000	94.000	392.00	5.0000	1803.0	0.0121	AETC	N	N
1758	19.000	94.000	207.00	72.000	1803.0	0.0101	AETC	N	N
1759	19.000	94.000	78.000	131.00	1803.0	0.0093	AETC	N	N
1760	19.000	94.000	17.000	281.00	1803.0	0.0086	AETC	N	N

1761	19.000	94.000	0.0000	581.00	1803.0	0.0091	AETC	N N
1762	19.000	94.000	0.0000	651.00	1803.0	0.0098	AETC	N N
1763	19.000	94.000	0.0000	599.00	1803.0	0.0089	AETC	N N
1764	19.000	94.000	4.0000	294.00	1803.0	0.0091	AETC	N N
1765	20.000	94.000	106.00	119.00	1660.0	0.0093	AETC	N N
1766	20.000	94.000	347.00	34.000	1660.0	0.0121	AETC	N N
1767	20.000	94.000	554.00	0.0000	1660.0	0.0145	AETC	N N
1768	20.000	94.000	660.00	0.0000	1660.0	0.0184	AETC	N N
1769	20.000	94.000	332.00	18.000	1660.0	0.0129	AETC	N N
1770	20.000	94.000	221.00	26.000	1660.0	0.0116	AETC	N N
1771	20.000	94.000	60.000	146.00	1660.0	0.0105	AETC	N N
1772	20.000	94.000	0.0000	227.00	1660.0	0.0098	AETC	N N
1773	20.000	94.000	0.0000	464.00	1660.0	0.0127	AETC	N N
1774	20.000	94.000	0.0000	479.00	1660.0	0.0112	AETC	N N
1775	20.000	94.000	0.0000	489.00	1660.0	0.0110	AETC	N N
1776	20.000	94.000	0.0000	332.00	1660.0	0.0099	AETC	N N
1777	21.000	94.000	55.000	184.00	6942.0	0.0099	AETC	N N
1778	21.000	94.000	243.00	39.000	6942.0	0.0111	AETC	N N
1779	21.000	94.000	392.00	1.0000	6942.0	0.0136	AETC	N N
1780	21.000	94.000	499.00	0.0000	6942.0	0.0145	AETC	N N
1781	21.000	94.000	268.00	7.0000	6942.0	0.0108	AETC	N N
1782	21.000	94.000	156.00	41.000	6942.0	0.0109	AETC	N N
1783	21.000	94.000	43.000	175.00	6942.0	0.0086	AETC	N N
1784	21.000	94.000	0.0000	324.00	6942.0	0.0090	AETC	N N
1785	21.000	94.000	0.0000	486.00	6942.0	0.0089	AETC	N N
1786	21.000	94.000	0.0000	495.00	6942.0	0.0091	AETC	N N
1787	21.000	94.000	0.0000	524.00	6942.0	0.0078	AETC	N N
1788	21.000	94.000	0.0000	0.0000	6942.0	0.0092	AETC	N N
1789	22.000	94.000	100.00	252.00	8924.0	0.0053	AETC	N N
1790	22.000	94.000	298.00	26.000	8924.0	0.0059	AETC	N N
1791	22.000	94.000	300.00	23.000	8924.0	0.0049	AETC	N N
1792	22.000	94.000	370.00	8.0000	8924.0	0.0064	AETC	N N
1793	22.000	94.000	284.00	27.000	8924.0	0.0060	AETC	N N
1794	22.000	94.000	137.00	82.000	8924.0	0.0052	AETC	N N
1795	22.000	94.000	56.000	139.00	8924.0	0.0051	AETC	N N
1796	22.000	94.000	12.000	297.00	8924.0	0.0052	AETC	N N
1797	22.000	94.000	0.0000	515.00	8924.0	0.0056	AETC	N N
1798	22.000	94.000	0.0000	637.00	8924.0	0.0060	AETC	N N
1799	22.000	94.000	0.0000	592.00	8924.0	0.0058	AETC	N N
1800	22.000	94.000	0.0000	359.00	8924.0	0.0051	AETC	N N
1801	23.000	94.000	83.000	246.00	1498.0	0.0079	AETC	Y N
1802	23.000	94.000	258.00	12.000	1498.0	0.0088	AETC	Y N
1803	23.000	94.000	322.00	7.0000	1498.0	0.0101	AETC	Y N
1804	23.000	94.000	454.00	0.0000	1498.0	0.0107	AETC	Y N
1805	23.000	94.000	280.00	11.000	1498.0	0.0092	AETC	Y N
1806	23.000	94.000	122.00	95.000	1498.0	0.0087	AETC	Y N
1807	23.000	94.000	17.000	193.00	1498.0	0.0071	AETC	Y N
1808	23.000	94.000	75.000	349.00	1498.0	0.0080	AETC	Y N
1809	23.000	94.000	0.0000	624.00	1498.0	0.0089	AETC	Y N
1810	23.000	94.000	0.0000	652.00	1498.0	0.0090	AETC	Y N
1811	23.000	94.000	0.0000	625.00	1498.0	0.0093	AETC	Y N
1812	23.000	94.000	1.0000	359.00	1498.0	0.0083	AETC	Y N
1813	24.000	94.000	538.00	5.0000	5152.0	0.0145	AETC	N N
1814	24.000	94.000	936.00	0.0000	5152.0	0.0206	AETC	N N
1815	24.000	94.000	970.00	0.0000	5152.0	0.0218	AETC	N N
1816	24.000	94.000	985.00	0.0000	5152.0	0.0211	AETC	N N
1817	24.000	94.000	905.00	0.0000	5152.0	0.0202	AETC	N N
1818	24.000	94.000	671.00	0.0000	5152.0	0.0145	AETC	N N
1819	24.000	94.000	545.00	0.0000	5152.0	0.0123	AETC	N N
1820	24.000	94.000	154.00	33.000	5152.0	0.0056	AETC	N N
1821	24.000	94.000	8.0000	228.00	5152.0	0.0043	AETC	N N
1822	24.000	94.000	0.0000	0.0000	5152.0	0.0000	AETC	N N
1823	24.000	94.000	0.0000	0.0000	5152.0	0.0000	AETC	N N
1824	24.000	94.000	0.0000	0.0000	5152.0	0.0000	AETC	N N
1825	25.000	94.000	4.0000	283.00	3048.0	0.0082	AETC	Y N
1826	25.000	94.000	184.00	1.0000	3048.0	0.0085	AETC	Y N
1827	25.000	94.000	363.00	0.0000	3048.0	0.0107	AETC	Y N
1828	25.000	94.000	359.00	0.0000	3048.0	0.0111	AETC	Y N
1829	25.000	94.000	257.00	2.0000	3048.0	0.0117	AETC	Y N
1830	25.000	94.000	62.000	42.000	3048.0	0.0089	AETC	Y N
1831	25.000	94.000	12.000	209.00	3048.0	0.0089	AETC	Y N

1832	25.000	94.000	0.0000	397.00	3048.0	0.0100	AETC	Y	N
1833	25.000	94.000	0.0000	796.00	3048.0	0.0106	AETC	Y	N
1834	25.000	94.000	0.0000	890.00	3048.0	0.0103	AETC	Y	N
1835	25.000	94.000	0.0000	942.00	3048.0	0.0114	AETC	Y	N
1836	25.000	94.000	0.0000	651.00	3048.0	0.0098	AETC	Y	N
1837	26.000	94.000	106.00	119.00	4075.0	0.0103	AETC	N	N
1838	26.000	94.000	347.00	34.000	4075.0	0.0141	AETC	N	N
1839	26.000	94.000	554.00	0.0000	4075.0	0.0172	AETC	N	N
1840	26.000	94.000	660.00	0.0000	4075.0	0.0194	AETC	N	N
1841	26.000	94.000	332.00	18.000	4075.0	0.0144	AETC	N	N
1842	26.000	94.000	221.00	26.000	4075.0	0.0132	AETC	N	N
1843	26.000	94.000	60.000	146.00	4075.0	0.0107	AETC	N	N
1844	26.000	94.000	0.0000	227.00	4075.0	0.0101	AETC	N	N
1845	26.000	94.000	0.0000	464.00	4075.0	0.0103	AETC	N	N
1846	26.000	94.000	0.0000	489.00	4075.0	0.0107	AETC	N	N
1847	26.000	94.000	0.0000	489.00	4075.0	0.0110	AETC	N	N
1848	26.000	94.000	0.0000	332.00	4075.0	0.0100	AETC	N	N
1849	27.000	94.000	85.000	267.00	3554.0	0.0094	AETC	Y	N
1850	27.000	94.000	287.00	31.000	3554.0	0.0119	AETC	Y	N
1851	27.000	94.000	323.00	22.000	3554.0	0.0116	AETC	Y	N
1852	27.000	94.000	391.00	8.0000	3554.0	0.0128	AETC	Y	N
1853	27.000	94.000	273.00	34.000	3554.0	0.0108	AETC	Y	N
1854	27.000	94.000	130.00	102.00	3554.0	0.0101	AETC	Y	N
1855	27.000	94.000	28.000	183.00	3554.0	0.0081	AETC	Y	N
1856	27.000	94.000	10.000	357.00	3554.0	0.0087	AETC	Y	N
1857	27.000	94.000	0.0000	593.00	3554.0	0.0092	AETC	Y	N
1858	27.000	94.000	0.0000	715.00	3554.0	0.0083	AETC	Y	N
1859	27.000	94.000	0.0000	659.00	3554.0	0.0101	AETC	Y	N
1860	27.000	94.000	0.0000	410.00	3554.0	0.0080	AETC	Y	N
1861	28.000	94.000	201.00	73.000	1395.0	0.0104	AETC	Y	N
1862	28.000	94.000	535.00	0.0000	1395.0	0.0171	AETC	Y	N
1863	28.000	94.000	640.00	0.0000	1395.0	0.0020	AETC	Y	N
1864	28.000	94.000	706.00	0.0000	1395.0	0.0185	AETC	Y	N
1865	28.000	94.000	541.00	0.0000	1395.0	0.0172	AETC	Y	N
1866	28.000	94.000	339.00	14.000	1395.0	0.0158	AETC	Y	N
1867	28.000	94.000	165.00	71.000	1395.0	0.0105	AETC	Y	N
1868	28.000	94.000	24.000	242.00	1395.0	0.0077	AETC	Y	N
1869	28.000	94.000	0.0000	568.00	1395.0	0.0086	AETC	Y	N
1870	28.000	94.000	0.0000	581.00	1395.0	0.0090	AETC	Y	N
1871	28.000	94.000	0.0000	511.00	1395.0	0.0081	AETC	Y	N
1872	28.000	94.000	9.0000	291.00	1395.0	0.0075	AETC	Y	N
1873	29.000	94.000	221.00	72.000	6342.0	0.0067	AETC	N	N
1874	29.000	94.000	540.00	3.0000	6342.0	0.0087	AETC	N	N
1875	29.000	94.000	615.00	0.0000	6342.0	0.0090	AETC	N	N
1876	29.000	94.000	766.00	0.0000	6342.0	0.0112	AETC	N	N
1877	29.000	94.000	656.00	0.0000	6342.0	0.0100	AETC	N	N
1878	29.000	94.000	342.00	28.000	6342.0	0.0068	AETC	N	N
1879	29.000	94.000	149.00	73.000	6342.0	0.0051	AETC	N	N
1880	29.000	94.000	44.000	168.00	6342.0	0.0055	AETC	N	N
1881	29.000	94.000	0.0000	523.00	6342.0	0.0056	AETC	N	N
1882	29.000	94.000	0.0000	545.00	6342.0	0.0050	AETC	N	N
1883	29.000	94.000	0.0000	576.00	6342.0	0.0058	AETC	N	N
1884	29.000	94.000	19.000	312.00	6342.0	0.0038	AETC	N	N
1885	30.000	94.000	27.000	220.00	3589.0	0.0076	AETC	Y	N
1886	30.000	94.000	165.00	55.000	3589.0	0.0091	AETC	Y	N
1887	30.000	94.000	396.00	1.0000	3589.0	0.0116	AETC	Y	N
1888	30.000	94.000	454.00	0.0000	3589.0	0.0137	AETC	Y	N
1889	30.000	94.000	198.00	23.000	3589.0	0.0103	AETC	Y	N
1890	30.000	94.000	122.00	53.000	3589.0	0.0086	AETC	Y	N
1891	30.000	94.000	31.000	158.00	3589.0	0.0079	AETC	Y	N
1892	30.000	94.000	0.0000	283.00	3589.0	0.0079	AETC	Y	N
1893	30.000	94.000	0.0000	426.00	3589.0	0.0085	AETC	Y	N
1894	30.000	94.000	0.0000	459.00	3589.0	0.0088	AETC	Y	N
1895	30.000	94.000	0.0000	454.00	3589.0	0.0084	AETC	Y	N
1896	30.000	94.000	0.0000	364.00	3589.0	0.0091	AETC	Y	N
1897	31.000	94.000	256.00	37.000	1097.0	0.0089	AETC	Y	N
1898	31.000	94.000	672.00	0.0000	1097.0	0.0150	AETC	Y	N
1899	31.000	94.000	751.00	0.0000	1097.0	0.0160	AETC	Y	N
1900	31.000	94.000	971.00	0.0000	1097.0	0.0206	AETC	Y	N
1901	31.000	94.000	803.00	0.0000	1097.0	0.0176	AETC	Y	N
1902	31.000	94.000	413.00	19.000	1097.0	0.0119	AETC	Y	N

1903	31.000	94.000	205.00	45.000	1097.0	0.0102	AETC	Y N
1904	31.000	94.000	59.000	149.00	1097.0	0.0080	AETC	Y N
1905	31.000	94.000	0.0000	492.00	1097.0	0.0085	AETC	Y N
1906	31.000	94.000	0.0000	512.00	1097.0	0.0084	AETC	Y N
1907	31.000	94.000	0.0000	500.00	1097.0	0.0091	AETC	Y N
1908	31.000	94.000	33.000	223.00	1097.0	0.0077	AETC	Y N
1909	32.000	94.000	100.00	252.00	1804.0	0.0329	AETC	N N
1910	32.000	94.000	298.00	26.000	1804.0	0.0305	AETC	N N
1911	32.000	94.000	300.00	23.000	1804.0	0.0328	AETC	N N
1912	32.000	94.000	370.00	8.0000	1804.0	0.0311	AETC	N N
1913	32.000	94.000	284.00	27.000	1804.0	0.0284	AETC	N N
1914	32.000	94.000	137.00	82.000	1804.0	0.0363	AETC	N N
1915	32.000	94.000	56.000	139.00	1804.0	0.0277	AETC	N N
1916	32.000	94.000	12.000	297.00	1804.0	0.0476	AETC	N N
1917	32.000	94.000	0.0000	515.00	1804.0	0.0390	AETC	N N
1918	32.000	94.000	0.0000	637.00	1804.0	0.0386	AETC	N N
1919	32.000	94.000	0.0000	592.00	1804.0	0.0375	AETC	N N
1920	32.000	94.000	0.0000	359.00	1804.0	0.0343	AETC	N N
1921	1.0000	94.000	319.00	3.0000	5898.0	0.0106	AMC	Y N
1922	1.0000	94.000	567.00	9.0000	5898.0	0.0200	AMC	Y N
1923	1.0000	94.000	914.00	0.0000	5898.0	0.0256	AMC	Y N
1924	1.0000	94.000	1180.0	0.0000	5898.0	0.0312	AMC	Y N
1925	1.0000	94.000	863.00	0.0000	5898.0	0.0297	AMC	Y N
1926	1.0000	94.000	672.00	3.0000	5898.0	0.0272	AMC	Y N
1927	1.0000	94.000	216.00	42.000	5898.0	0.0137	AMC	Y N
1928	1.0000	94.000	209.00	39.000	5898.0	0.0081	AMC	Y N
1929	1.0000	94.000	5.0000	322.00	5898.0	0.0095	AMC	Y N
1930	1.0000	94.000	0.0000	452.00	5898.0	0.0108	AMC	Y N
1931	1.0000	94.000	3.0000	241.00	5898.0	0.0103	AMC	Y N
1932	1.0000	94.000	20.000	102.00	5898.0	0.0108	AMC	Y N
1933	2.0000	94.000	49.000	127.00	2944.0	0.0087	AMC	Y N
1934	2.0000	94.000	206.00	42.000	2944.0	0.0117	AMC	Y N
1935	2.0000	94.000	504.00	0.0000	2944.0	0.0172	AMC	Y N
1936	2.0000	94.000	568.00	0.0000	2944.0	0.0192	AMC	Y N
1937	2.0000	94.000	327.00	7.0000	2944.0	0.0153	AMC	Y N
1938	2.0000	94.000	152.00	42.000	2944.0	0.0130	AMC	Y N
1939	2.0000	94.000	30.000	133.00	2944.0	0.0052	AMC	Y N
1940	2.0000	94.000	11.000	210.00	2944.0	0.0056	AMC	Y N
1941	2.0000	94.000	0.0000	489.00	2944.0	0.0061	AMC	Y N
1942	2.0000	94.000	0.0000	537.00	2944.0	0.0072	AMC	Y N
1943	2.0000	94.000	0.0000	473.00	2944.0	0.0064	AMC	Y N
1944	2.0000	94.000	0.0000	327.00	2944.0	0.0044	AMC	Y N
1945	3.0000	94.000	284.00	5.0000	3349.0	0.0111	AMC	Y N
1946	3.0000	94.000	540.00	7.0000	3349.0	0.0170	AMC	Y N
1947	3.0000	94.000	898.00	0.0000	3349.0	0.0237	AMC	Y N
1948	3.0000	94.000	1145.0	0.0000	3349.0	0.0262	AMC	Y N
1949	3.0000	94.000	872.00	0.0000	3349.0	0.0227	AMC	Y N
1950	3.0000	94.000	690.00	0.0000	3349.0	0.0225	AMC	Y N
1951	3.0000	94.000	234.00	21.000	3349.0	0.0146	AMC	Y N
1952	3.0000	94.000	191.00	41.000	3349.0	0.0094	AMC	Y N
1953	3.0000	94.000	5.0000	303.00	3349.0	0.0092	AMC	Y N
1954	3.0000	94.000	0.0000	433.00	3349.0	0.0094	AMC	Y N
1955	3.0000	94.000	0.0000	0.0000	3349.0	0.0095	AMC	Y N
1956	3.0000	94.000	0.0000	0.0000	3349.0	0.0085	AMC	Y N
1957	4.0000	94.000	535.00	0.0000	4394.0	0.0139	AMC	Y N
1958	4.0000	94.000	1130.0	0.0000	4394.0	0.0219	AMC	Y N
1959	4.0000	94.000	1116.0	0.0000	4394.0	0.0237	AMC	Y N
1960	4.0000	94.000	965.00	0.0000	4394.0	0.0223	AMC	Y N
1961	4.0000	94.000	1070.0	0.0000	4394.0	0.0222	AMC	Y N
1962	4.0000	94.000	784.00	0.0000	4394.0	0.0187	AMC	Y N
1963	4.0000	94.000	544.00	0.0000	4394.0	0.0144	AMC	Y N
1964	4.0000	94.000	386.00	0.0000	4394.0	0.0105	AMC	Y N
1965	4.0000	94.000	209.00	0.0000	4394.0	0.0070	AMC	Y N
1966	4.0000	94.000	47.000	207.00	4394.0	0.0063	AMC	Y N
1967	4.0000	94.000	53.000	106.00	4394.0	0.0067	AMC	Y N
1968	4.0000	94.000	141.00	8.0000	4394.0	0.0079	AMC	Y N
1969	5.0000	94.000	705.00	0.0000	3821.0	0.0231	AMC	Y N
1970	5.0000	94.000	1283.0	0.0000	3821.0	0.0266	AMC	Y N
1971	5.0000	94.000	1563.0	0.0000	3821.0	0.0324	AMC	Y N
1972	5.0000	94.000	2198.0	0.0000	3821.0	0.0272	AMC	Y N
1973	5.0000	94.000	1743.0	0.0000	3821.0	0.0290	AMC	Y N

1974	5.0000	94.000	1051.0	0.0000	3821.0	0.0243	AMC	Y	N
1975	5.0000	94.000	652.00	0.0000	3821.0	0.0219	AMC	Y	N
1976	5.0000	94.000	212.00	40.000	3821.0	0.0167	AMC	Y	N
1977	5.0000	94.000	17.000	79.000	3821.0	0.0146	AMC	Y	N
1978	5.0000	94.000	12.000	84.000	3821.0	0.0135	AMC	Y	N
1979	5.0000	94.000	61.000	134.00	3821.0	0.0155	AMC	Y	N
1980	5.0000	94.000	165.00	54.000	3821.0	0.0138	AMC	Y	N
1981	6.0000	94.000	449.00	0.0000	2315.0	0.0178	AMC	Y	N
1982	6.0000	94.000	766.00	0.0000	2315.0	0.0242	AMC	Y	N
1983	6.0000	94.000	1104.0	0.0000	2315.0	0.0282	AMC	Y	N
1984	6.0000	94.000	1477.0	0.0000	2315.0	0.0291	AMC	Y	N
1985	6.0000	94.000	1209.0	0.0000	2315.0	0.0270	AMC	Y	N
1986	6.0000	94.000	1040.0	0.0000	2315.0	0.0266	AMC	Y	N
1987	6.0000	94.000	393.00	22.000	2315.0	0.0189	AMC	Y	N
1988	6.0000	94.000	197.00	63.000	2315.0	0.0139	AMC	Y	N
1989	6.0000	94.000	18.000	266.00	2315.0	0.0120	AMC	Y	N
1990	6.0000	94.000	0.0000	0.0000	2315.0	0.0000	AMC	Y	N
1991	6.0000	94.000	0.0000	0.0000	2315.0	0.0000	AMC	Y	N
1992	6.0000	94.000	0.0000	0.0000	2315.0	0.0000	AMC	Y	N
1993	7.0000	94.000	10.000	114.00	3719.0	0.0073	AMC	Y	N
1994	7.0000	94.000	178.00	10.000	3719.0	0.0084	AMC	Y	N
1995	7.0000	94.000	367.00	0.0000	3719.0	0.0104	AMC	Y	N
1996	7.0000	94.000	289.00	0.0000	3719.0	0.0104	AMC	Y	N
1997	7.0000	94.000	383.00	0.0000	3719.0	0.0107	AMC	Y	N
1998	7.0000	94.000	228.00	1.0000	3719.0	0.0092	AMC	Y	N
1999	7.0000	94.000	178.00	25.000	3719.0	0.0081	AMC	Y	N
2000	7.0000	94.000	96.000	32.000	3719.0	0.0071	AMC	Y	N
2001	7.0000	94.000	0.0000	319.00	3719.0	0.0075	AMC	Y	N
2002	7.0000	94.000	0.0000	366.00	3719.0	0.0087	AMC	Y	N
2003	7.0000	94.000	0.0000	515.00	3719.0	0.0083	AMC	Y	N
2004	7.0000	94.000	1.0000	285.00	3719.0	0.0082	AMC	Y	N
2005	8.0000	94.000	381.00	0.0000	3683.0	0.0082	AMC	Y	N
2006	8.0000	94.000	759.00	0.0000	3683.0	0.0123	AMC	Y	N
2007	8.0000	94.000	757.00	0.0000	3683.0	0.0150	AMC	Y	N
2008	8.0000	94.000	663.00	0.0000	3683.0	0.0140	AMC	Y	N
2009	8.0000	94.000	707.00	0.0000	3683.0	0.0141	AMC	Y	N
2010	8.0000	94.000	531.00	0.0000	3683.0	0.0134	AMC	Y	N
2011	8.0000	94.000	417.00	0.0000	3683.0	0.0122	AMC	Y	N
2012	8.0000	94.000	277.00	0.0000	3683.0	0.0093	AMC	Y	N
2013	8.0000	94.000	182.00	0.0000	3683.0	0.0092	AMC	Y	N
2014	8.0000	94.000	0.0000	0.0000	3683.0	0.0069	AMC	Y	N
2015	8.0000	94.000	0.0000	0.0000	3683.0	0.0072	AMC	Y	N
2016	8.0000	94.000	0.0000	0.0000	3683.0	0.0075	AMC	Y	N
2017	9.0000	94.000	295.00	32.000	2212.0	0.0084	AMC	Y	N
2018	9.0000	94.000	664.00	0.0000	2212.0	0.0178	AMC	Y	N
2019	9.0000	94.000	751.00	0.0000	2212.0	0.0191	AMC	Y	N
2020	9.0000	94.000	1006.0	0.0000	2212.0	0.0227	AMC	Y	N
2021	9.0000	94.000	861.00	0.0000	2212.0	0.0197	AMC	Y	N
2022	9.0000	94.000	444.00	8.0000	2212.0	0.0153	AMC	Y	N
2023	9.0000	94.000	316.00	29.000	2212.0	0.0128	AMC	Y	N
2024	9.0000	94.000	66.000	129.00	2212.0	0.0104	AMC	Y	N
2025	9.0000	94.000	0.0000	409.00	2212.0	0.0088	AMC	Y	N
2026	9.0000	94.000	0.0000	355.00	2212.0	0.0079	AMC	Y	N
2027	9.0000	94.000	0.0000	380.00	2212.0	0.0082	AMC	Y	N
2028	9.0000	94.000	32.000	237.00	2212.0	0.0077	AMC	Y	N
2029	10.000	94.000	339.00	3.0000	4199.0	0.0124	AMC	Y	N
2030	10.000	94.000	593.00	4.0000	4199.0	0.0177	AMC	Y	N
2031	10.000	94.000	908.00	0.0000	4199.0	0.0203	AMC	Y	N
2032	10.000	94.000	1214.0	0.0000	4199.0	0.0245	AMC	Y	N
2033	10.000	94.000	992.00	0.0000	4199.0	0.0232	AMC	Y	N
2034	10.000	94.000	742.00	0.0000	4199.0	0.0254	AMC	Y	N
2035	10.000	94.000	289.00	19.000	4199.0	0.0145	AMC	Y	N
2036	10.000	94.000	211.00	31.000	4199.0	0.0106	AMC	Y	N
2037	10.000	94.000	6.0000	279.00	4199.0	0.0092	AMC	Y	N
2038	10.000	94.000	0.0000	0.0000	4199.0	0.0126	AMC	Y	N
2039	10.000	94.000	0.0000	0.0000	4199.0	0.0122	AMC	Y	N
2040	10.000	94.000	0.0000	0.0000	4199.0	0.0115	AMC	Y	N
2041	11.000	94.000	10.000	114.00	6069.0	0.0036	AMC	Y	N
2042	11.000	94.000	178.00	10.000	6069.0	0.0043	AMC	Y	N
2043	11.000	94.000	367.00	0.0000	6069.0	0.0044	AMC	Y	N
2044	11.000	94.000	289.00	0.0000	6069.0	0.0044	AMC	Y	N

2045	11.000	94.000	0.0000	0.0000	6069.0	0.0000	AMC	Y	N
2046	11.000	94.000	0.0000	0.0000	6069.0	0.0000	AMC	Y	N
2047	11.000	94.000	0.0000	0.0000	6069.0	0.0000	AMC	Y	N
2048	11.000	94.000	0.0000	0.0000	6069.0	0.0000	AMC	Y	N
2049	11.000	94.000	0.0000	0.0000	6069.0	0.0000	AMC	Y	N
2050	11.000	94.000	0.0000	0.0000	6069.0	0.0000	AMC	Y	N
2051	11.000	94.000	0.0000	0.0000	6069.0	0.0000	AMC	Y	N
2052	11.000	94.000	0.0000	0.0000	6069.0	0.0000	AMC	Y	N
2053	12.000	94.000	605.00	0.0000	2577.0	0.0132	AMC	Y	N
2054	12.000	94.000	577.00	0.0000	2577.0	0.0175	AMC	Y	N
2055	12.000	94.000	1325.0	0.0000	2577.0	0.0266	AMC	Y	N
2056	12.000	94.000	1835.0	0.0000	2577.0	0.0320	AMC	Y	N
2057	12.000	94.000	1420.0	0.0000	2577.0	0.0280	AMC	Y	N
2058	12.000	94.000	1089.0	0.0000	2577.0	0.0189	AMC	Y	N
2059	12.000	94.000	620.00	0.0000	2577.0	0.0217	AMC	Y	N
2060	12.000	94.000	344.00	13.000	2577.0	0.0178	AMC	Y	N
2061	12.000	94.000	51.000	100.00	2577.0	0.0074	AMC	Y	N
2062	12.000	94.000	0.0000	0.0000	2577.0	0.0087	AMC	Y	N
2063	12.000	94.000	0.0000	0.0000	2577.0	0.0070	AMC	Y	N
2064	12.000	94.000	0.0000	0.0000	2577.0	0.0083	AMC	Y	N
2065	13.000	94.000	307.00	11.000	3944.0	0.0117	AMC	Y	N
2066	13.000	94.000	668.00	0.0000	3944.0	0.0168	AMC	Y	N
2067	13.000	94.000	873.00	0.0000	3944.0	0.0181	AMC	Y	N
2068	13.000	94.000	1198.0	0.0000	3944.0	0.0225	AMC	Y	N
2069	13.000	94.000	848.00	0.0000	3944.0	0.0180	AMC	Y	N
2070	13.000	94.000	602.00	0.0000	3944.0	0.0165	AMC	Y	N
2071	13.000	94.000	290.00	30.000	3944.0	0.0135	AMC	Y	N
2072	13.000	94.000	114.00	53.000	3944.0	0.0110	AMC	Y	N
2073	13.000	94.000	3.0000	380.00	3944.0	0.0135	AMC	Y	N
2074	13.000	94.000	0.0000	448.00	3944.0	0.0116	AMC	Y	N
2075	13.000	94.000	0.0000	315.00	3944.0	0.0151	AMC	Y	N
2076	13.000	94.000	58.000	132.00	3944.0	0.0107	AMC	Y	N
2077	14.000	94.000	38.000	398.00	6635.0	0.0058	AMC	Y	N
2078	14.000	94.000	10.000	7.0000	6635.0	0.0059	AMC	Y	N
2079	14.000	94.000	543.00	0.0000	6635.0	0.0109	AMC	Y	N
2080	14.000	94.000	500.00	0.0000	6635.0	0.0116	AMC	Y	N
2081	14.000	94.000	467.00	0.0000	6635.0	0.0099	AMC	Y	N
2082	14.000	94.000	181.00	5.0000	6635.0	0.0129	AMC	Y	N
2083	14.000	94.000	139.00	14.000	6635.0	0.0064	AMC	Y	N
2084	14.000	94.000	89.000	34.000	6635.0	0.0055	AMC	Y	N
2085	14.000	94.000	11.000	147.00	6635.0	0.0060	AMC	Y	N
2086	14.000	94.000	0.0000	0.0000	6635.0	0.0059	AMC	Y	N
2087	14.000	94.000	0.0000	0.0000	6635.0	0.0059	AMC	Y	N
2088	14.000	94.000	0.0000	0.0000	6635.0	0.0055	AMC	Y	N
2089	1.0000	93.000	358.00	11.000	5786.0	0.0110	AMC	Y	N
2090	1.0000	93.000	530.00	0.0000	5786.0	0.0170	AMC	Y	N
2091	1.0000	93.000	828.00	0.0000	5786.0	0.0259	AMC	Y	N
2092	1.0000	93.000	899.00	0.0000	5786.0	0.0251	AMC	Y	N
2093	1.0000	93.000	906.00	0.0000	5786.0	0.0260	AMC	Y	N
2094	1.0000	93.000	769.00	0.0000	5786.0	0.0285	AMC	Y	N
2095	1.0000	93.000	366.00	8.0000	5786.0	0.0108	AMC	Y	N
2096	1.0000	93.000	68.000	60.000	5786.0	0.0089	AMC	Y	N
2097	1.0000	93.000	19.000	284.00	5786.0	0.0084	AMC	Y	N
2098	1.0000	93.000	0.0000	476.00	5786.0	0.0110	AMC	Y	N
2099	1.0000	93.000	0.0000	333.00	5786.0	0.0077	AMC	Y	N
2100	1.0000	93.000	66.000	161.00	5786.0	0.0168	AMC	Y	N
2101	2.0000	93.000	70.000	79.000	2961.0	0.0080	AMC	Y	N
2102	2.0000	93.000	197.00	68.000	2961.0	0.0119	AMC	Y	N
2103	2.0000	93.000	430.00	5.0000	2961.0	0.0170	AMC	Y	N
2104	2.0000	93.000	353.00	7.0000	2961.0	0.0166	AMC	Y	N
2105	2.0000	93.000	421.00	0.0000	2961.0	0.0165	AMC	Y	N
2106	2.0000	93.000	279.00	4.0000	2961.0	0.0168	AMC	Y	N
2107	2.0000	93.000	132.00	37.000	2961.0	0.0100	AMC	Y	N
2108	2.0000	93.000	1.0000	241.00	2961.0	0.0052	AMC	Y	N
2109	2.0000	93.000	0.0000	440.00	2961.0	0.0061	AMC	Y	N
2110	2.0000	93.000	0.0000	644.00	2961.0	0.0071	AMC	Y	N
2111	2.0000	93.000	0.0000	536.00	2961.0	0.0064	AMC	Y	N
2112	2.0000	93.000	3.0000	410.00	2961.0	0.0040	AMC	Y	N
2113	3.0000	93.000	348.00	11.000	3349.0	0.0122	AMC	Y	N
2114	3.0000	93.000	514.00	0.0000	3349.0	0.0183	AMC	Y	N
2115	3.0000	93.000	788.00	0.0000	3349.0	0.0228	AMC	Y	N

2116	3.0000	93.000	826.00	0.0000	3349.0	0.0236	AMC	Y	N
2117	3.0000	93.000	913.00	0.0000	3349.0	0.0263	AMC	Y	N
2118	3.0000	93.000	769.00	0.0000	3349.0	0.0236	AMC	Y	N
2119	3.0000	93.000	368.00	1.0000	3349.0	0.0173	AMC	Y	N
2120	3.0000	93.000	88.000	60.000	3349.0	0.0092	AMC	Y	N
2121	3.0000	93.000	16.000	250.00	3349.0	0.0092	AMC	Y	N
2122	3.0000	93.000	0.0000	488.00	3349.0	0.0088	AMC	Y	N
2123	3.0000	93.000	0.0000	339.00	3349.0	0.0102	AMC	Y	N
2124	3.0000	93.000	57.000	165.00	3349.0	0.0094	AMC	Y	N
2125	4.0000	93.000	0.0000	0.0000	4320.0	0.0139	AMC	Y	N
2126	4.0000	93.000	0.0000	0.0000	4320.0	0.0211	AMC	Y	N
2127	4.0000	93.000	0.0000	0.0000	4320.0	0.0263	AMC	Y	N
2128	4.0000	93.000	0.0000	0.0000	4320.0	0.0268	AMC	Y	N
2129	4.0000	93.000	0.0000	0.0000	4320.0	0.0280	AMC	Y	N
2130	4.0000	93.000	0.0000	0.0000	4320.0	0.0198	AMC	Y	N
2131	4.0000	93.000	0.0000	0.0000	4320.0	0.0168	AMC	Y	N
2132	4.0000	93.000	0.0000	0.0000	4320.0	0.0105	AMC	Y	N
2133	4.0000	93.000	0.0000	0.0000	4320.0	0.0086	AMC	Y	N
2134	4.0000	93.000	0.0000	0.0000	4320.0	0.0075	AMC	Y	N
2135	4.0000	93.000	0.0000	0.0000	4320.0	0.0073	AMC	Y	N
2136	4.0000	93.000	0.0000	0.0000	4320.0	0.0078	AMC	Y	N
2137	5.0000	93.000	682.00	0.0000	3793.0	0.0249	AMC	Y	N
2138	5.0000	93.000	1178.0	0.0000	3793.0	0.0252	AMC	Y	N
2139	5.0000	93.000	1799.0	0.0000	3793.0	0.0312	AMC	Y	N
2140	5.0000	93.000	1871.0	0.0000	3793.0	0.0342	AMC	Y	N
2141	5.0000	93.000	1539.0	0.0000	3793.0	0.0308	AMC	Y	N
2142	5.0000	93.000	1209.0	4.0000	3793.0	0.0268	AMC	Y	N
2143	5.0000	93.000	673.00	0.0000	3793.0	0.0229	AMC	Y	N
2144	5.0000	93.000	297.00	24.000	3793.0	0.0173	AMC	Y	N
2145	5.0000	93.000	130.00	63.000	3793.0	0.0167	AMC	Y	N
2146	5.0000	93.000	48.000	80.000	3793.0	0.0165	AMC	Y	N
2147	5.0000	93.000	37.000	116.00	3793.0	0.0180	AMC	Y	N
2148	5.0000	93.000	346.00	8.0000	3793.0	0.0156	AMC	Y	N
2149	6.0000	93.000	404.00	3.0000	2315.0	0.0165	AMC	Y	N
2150	6.0000	93.000	721.00	0.0000	2315.0	0.0245	AMC	Y	N
2151	6.0000	93.000	1069.0	0.0000	2315.0	0.0309	AMC	Y	N
2152	6.0000	93.000	1129.0	0.0000	2315.0	0.0407	AMC	Y	N
2153	6.0000	93.000	1148.0	0.0000	2315.0	0.0314	AMC	Y	N
2154	6.0000	93.000	881.00	0.0000	2315.0	0.0279	AMC	Y	N
2155	6.0000	93.000	489.00	0.0000	2315.0	0.0217	AMC	Y	N
2156	6.0000	93.000	129.00	41.000	2315.0	0.0129	AMC	Y	N
2157	6.0000	93.000	50.000	160.00	2315.0	0.0145	AMC	Y	N
2158	6.0000	93.000	0.0000	314.00	2315.0	0.0131	AMC	Y	N
2159	6.0000	93.000	5.0000	263.00	2315.0	0.0127	AMC	Y	N
2160	6.0000	93.000	0.0000	26.000	2315.0	0.0119	AMC	Y	N
2161	7.0000	93.000	13.000	171.00	3382.0	0.0066	AMC	Y	N
2162	7.0000	93.000	202.00	2.0000	3382.0	0.0070	AMC	Y	N
2163	7.0000	93.000	460.00	0.0000	3382.0	0.0107	AMC	Y	N
2164	7.0000	93.000	369.00	0.0000	3382.0	0.0107	AMC	Y	N
2165	7.0000	93.000	303.00	1.0000	3382.0	0.0093	AMC	Y	N
2166	7.0000	93.000	163.00	7.0000	3382.0	0.0078	AMC	Y	N
2167	7.0000	93.000	85.000	49.000	3382.0	0.0065	AMC	Y	N
2168	7.0000	93.000	7.0000	133.00	3382.0	0.0067	AMC	Y	N
2169	7.0000	93.000	17.000	305.00	3382.0	0.0067	AMC	Y	N
2170	7.0000	93.000	0.0000	268.00	3382.0	0.0081	AMC	Y	N
2171	7.0000	93.000	0.0000	352.00	3382.0	0.0073	AMC	Y	N
2172	7.0000	93.000	0.0000	312.00	3382.0	0.0081	AMC	Y	N
2173	8.0000	93.000	394.00	0.0000	3670.0	0.0105	AMC	Y	N
2174	8.0000	93.000	654.00	0.0000	3670.0	0.0126	AMC	Y	N
2175	8.0000	93.000	869.00	0.0000	3670.0	0.0156	AMC	Y	N
2176	8.0000	93.000	934.00	0.0000	3670.0	0.0173	AMC	Y	N
2177	8.0000	93.000	729.00	0.0000	3670.0	0.0146	AMC	Y	N
2178	8.0000	93.000	589.00	0.0000	3670.0	0.0143	AMC	Y	N
2179	8.0000	93.000	460.00	0.0000	3670.0	0.0119	AMC	Y	N
2180	8.0000	93.000	179.00	4.0000	3670.0	0.0098	AMC	Y	N
2181	8.0000	93.000	149.00	5.0000	3670.0	0.0087	AMC	Y	N
2182	8.0000	93.000	114.00	1.0000	3670.0	0.0078	AMC	Y	N
2183	8.0000	93.000	60.000	60.000	3670.0	0.0058	AMC	Y	N
2184	8.0000	93.000	170.00	23.000	3670.0	0.0077	AMC	Y	N
2185	9.0000	93.000	199.00	48.000	2170.0	0.0098	AMC	Y	N
2186	9.0000	93.000	677.00	0.0000	2170.0	0.0163	AMC	Y	N

2187	9.0000	93.000	896.00	0.0000	2170.0	0.0198	AMC	Y	N
2188	9.0000	93.000	1040.0	0.0000	2170.0	0.0231	AMC	Y	N
2189	9.0000	93.000	856.00	0.0000	2170.0	0.0185	AMC	Y	N
2190	9.0000	93.000	641.00	3.0000	2170.0	0.0184	AMC	Y	N
2191	9.0000	93.000	320.00	2.0000	2170.0	0.0131	AMC	Y	N
2192	9.0000	93.000	79.000	77.000	2170.0	0.0090	AMC	Y	N
2193	9.0000	93.000	9.0000	333.00	2170.0	0.0081	AMC	Y	N
2194	9.0000	93.000	0.0000	550.00	2170.0	0.0082	AMC	Y	N
2195	9.0000	93.000	0.0000	502.00	2170.0	0.0077	AMC	Y	N
2196	9.0000	93.000	57.000	132.00	2170.0	0.0062	AMC	Y	N
2197	10.000	93.000	399.00	5.0000	4192.0	0.0191	AMC	Y	N
2198	10.000	93.000	550.00	0.0000	4192.0	0.0221	AMC	Y	N
2199	10.000	93.000	869.00	0.0000	4192.0	0.0225	AMC	Y	N
2200	10.000	93.000	871.00	0.0000	4192.0	0.0223	AMC	Y	N
2201	10.000	93.000	969.00	0.0000	4192.0	0.0238	AMC	Y	N
2202	10.000	93.000	804.00	0.0000	4192.0	0.0239	AMC	Y	N
2203	10.000	93.000	380.00	0.0000	4192.0	0.0185	AMC	Y	N
2204	10.000	93.000	105.00	46.000	4192.0	0.0110	AMC	Y	N
2205	10.000	93.000	22.000	208.00	4192.0	0.0089	AMC	Y	N
2206	10.000	93.000	0.0000	404.00	4192.0	0.0123	AMC	Y	N
2207	10.000	93.000	0.0000	312.00	4192.0	0.0131	AMC	Y	N
2208	10.000	93.000	85.000	141.00	4192.0	0.0118	AMC	Y	N
2209	11.000	93.000	14.000	143.00	6069.0	0.0054	AMC	Y	N
2210	11.000	93.000	196.00	6.0000	6069.0	0.0063	AMC	Y	N
2211	11.000	93.000	468.00	0.0000	6069.0	0.0088	AMC	Y	N
2212	11.000	93.000	410.00	0.0000	6069.0	0.0095	AMC	Y	N
2213	11.000	93.000	328.00	0.0000	6069.0	0.0076	AMC	Y	N
2214	11.000	93.000	140.00	4.0000	6069.0	0.0066	AMC	Y	N
2215	11.000	93.000	50.000	47.000	6069.0	0.0052	AMC	Y	N
2216	11.000	93.000	3.0000	139.00	6069.0	0.0052	AMC	Y	N
2217	11.000	93.000	18.000	310.00	6069.0	0.0052	AMC	Y	N
2218	11.000	93.000	0.0000	313.00	6069.0	0.0050	AMC	Y	N
2219	11.000	93.000	0.0000	352.00	6069.0	0.0054	AMC	Y	N
2220	11.000	93.000	0.0000	312.00	6069.0	0.0044	AMC	Y	N
2221	12.000	93.000	639.00	0.0000	2650.0	0.0190	AMC	Y	N
2222	12.000	93.000	870.00	0.0000	2650.0	0.0219	AMC	Y	N
2223	12.000	93.000	1177.0	0.0000	2650.0	0.0276	AMC	Y	N
2224	12.000	93.000	1385.0	0.0000	2650.0	0.0290	AMC	Y	N
2225	12.000	93.000	1576.0	0.0000	2650.0	0.0303	AMC	Y	N
2226	12.000	93.000	1217.0	0.0000	2650.0	0.0296	AMC	Y	N
2227	12.000	93.000	631.00	0.0000	2650.0	0.0203	AMC	Y	N
2228	12.000	93.000	302.00	1.0000	2650.0	0.0157	AMC	Y	N
2229	12.000	93.000	102.00	38.000	2650.0	0.0064	AMC	Y	N
2230	12.000	93.000	0.0000	12.000	2650.0	0.0059	AMC	Y	N
2231	12.000	93.000	25.000	114.00	2650.0	0.0068	AMC	Y	N
2232	12.000	93.000	25.000	214.00	2650.0	0.0066	AMC	Y	N
2233	13.000	93.000	261.00	16.000	3825.0	0.0112	AMC	Y	N
2234	13.000	93.000	608.00	0.0000	3825.0	0.0172	AMC	Y	N
2235	13.000	93.000	923.00	0.0000	3825.0	0.0202	AMC	Y	N
2236	13.000	93.000	1091.0	0.0000	3825.0	0.0146	AMC	Y	N
2237	13.000	93.000	970.00	0.0000	3825.0	0.0133	AMC	Y	N
2238	13.000	93.000	740.00	0.0000	3825.0	0.0173	AMC	Y	N
2239	13.000	93.000	372.00	5.0000	3825.0	0.0134	AMC	Y	N
2240	13.000	93.000	75.000	80.000	3825.0	0.0118	AMC	Y	N
2241	13.000	93.000	13.000	291.00	3825.0	0.0126	AMC	Y	N
2242	13.000	93.000	0.0000	500.00	3825.0	0.0153	AMC	Y	N
2243	13.000	93.000	0.0000	427.00	3825.0	0.0131	AMC	Y	N
2244	13.000	93.000	69.000	99.000	3825.0	0.0111	AMC	Y	N
2245	14.000	93.000	7.0000	7.0000	6635.0	0.0058	AMC	Y	N
2246	14.000	93.000	239.00	16.000	6635.0	0.0065	AMC	Y	N
2247	14.000	93.000	637.00	0.0000	6635.0	0.0091	AMC	Y	N
2248	14.000	93.000	628.00	20.000	6635.0	0.0133	AMC	Y	N
2249	14.000	93.000	500.00	0.0000	6635.0	0.0114	AMC	Y	N
2250	14.000	93.000	221.00	0.0000	6635.0	0.0098	AMC	Y	N
2251	14.000	93.000	205.00	7.0000	6635.0	0.0083	AMC	Y	N
2252	14.000	93.000	63.000	44.000	6635.0	0.0069	AMC	Y	N
2253	14.000	93.000	15.000	266.00	6635.0	0.0056	AMC	Y	N
2254	14.000	93.000	0.0000	232.00	6635.0	0.0061	AMC	Y	N
2255	14.000	93.000	0.0000	259.00	6635.0	0.0044	AMC	Y	N
2256	14.000	93.000	4.0000	185.00	6635.0	0.0055	AMC	Y	N
2257	1.0000	92.000	259.00	19.000	5665.0	0.0103	AMC	Y	N

2258	1.0000	92.000	547.00	5.0000	5665.0	0.0185	AMC	Y	N
2259	1.0000	92.000	781.00	0.0000	5665.0	0.0273	AMC	Y	N
2260	1.0000	92.000	898.00	0.0000	5665.0	0.0293	AMC	Y	N
2261	1.0000	92.000	766.00	0.0000	5665.0	0.0252	AMC	Y	N
2262	1.0000	92.000	697.00	0.0000	5665.0	0.0245	AMC	Y	N
2263	1.0000	92.000	0.0000	10.000	5665.0	0.0171	AMC	Y	N
2264	1.0000	92.000	0.0000	28.000	5665.0	0.0099	AMC	Y	N
2265	1.0000	92.000	20.000	129.00	5665.0	0.0084	AMC	Y	N
2266	1.0000	92.000	0.0000	350.00	5665.0	0.0061	AMC	Y	N
2267	1.0000	92.000	5.0000	189.00	5665.0	0.0092	AMC	Y	N
2268	1.0000	92.000	69.000	111.00	5665.0	0.0138	AMC	Y	N
2269	2.0000	92.000	41.000	128.00	2954.0	0.0052	AMC	Y	N
2270	2.0000	92.000	281.00	18.000	2954.0	0.0163	AMC	Y	N
2271	2.0000	92.000	349.00	25.000	2954.0	0.0169	AMC	Y	N
2272	2.0000	92.000	473.00	0.0000	2954.0	0.0195	AMC	Y	N
2273	2.0000	92.000	293.00	7.0000	2954.0	0.0166	AMC	Y	N
2274	2.0000	92.000	234.00	20.000	2954.0	0.0122	AMC	Y	N
2275	2.0000	92.000	119.00	83.000	2954.0	0.0064	AMC	Y	N
2276	2.0000	92.000	28.000	199.00	2954.0	0.0054	AMC	Y	N
2277	2.0000	92.000	0.0000	381.00	2954.0	0.0063	AMC	Y	N
2278	2.0000	92.000	0.0000	592.00	2954.0	0.0071	AMC	Y	N
2279	2.0000	92.000	0.0000	495.00	2954.0	0.0062	AMC	Y	N
2280	2.0000	92.000	3.0000	345.00	2954.0	0.0040	AMC	Y	N
2281	3.0000	92.000	236.00	23.000	3542.0	0.0104	AMC	Y	N
2282	3.0000	92.000	523.00	3.0000	3542.0	0.0158	AMC	Y	N
2283	3.0000	92.000	750.00	0.0000	3542.0	0.0199	AMC	Y	N
2284	3.0000	92.000	881.00	0.0000	3542.0	0.0251	AMC	Y	N
2285	3.0000	92.000	776.00	0.0000	3542.0	0.0226	AMC	Y	N
2286	3.0000	92.000	709.00	0.0000	3542.0	0.0212	AMC	Y	N
2287	3.0000	92.000	407.00	7.0000	3542.0	0.0174	AMC	Y	N
2288	3.0000	92.000	208.00	38.000	3542.0	0.0095	AMC	Y	N
2289	3.0000	92.000	13.000	127.00	3542.0	0.0075	AMC	Y	N
2290	3.0000	92.000	0.0000	361.00	3542.0	0.0082	AMC	Y	N
2291	3.0000	92.000	0.0000	232.00	3542.0	0.0080	AMC	Y	N
2292	3.0000	92.000	51.000	128.00	3542.0	0.0082	AMC	Y	N
2293	4.0000	92.000	612.00	0.0000	4460.0	0.0146	AMC	Y	N
2294	4.0000	92.000	962.00	0.0000	4460.0	0.0222	AMC	Y	N
2295	4.0000	92.000	1044.0	0.0000	4460.0	0.0239	AMC	Y	N
2296	4.0000	92.000	1080.0	0.0000	4460.0	0.0224	AMC	Y	N
2297	4.0000	92.000	798.00	0.0000	4460.0	0.0183	AMC	Y	N
2298	4.0000	92.000	636.00	0.0000	4460.0	0.0167	AMC	Y	N
2299	4.0000	92.000	552.00	0.0000	4460.0	0.0128	AMC	Y	N
2300	4.0000	92.000	268.00	16.000	4460.0	0.0081	AMC	Y	N
2301	4.0000	92.000	87.000	122.00	4460.0	0.0067	AMC	Y	N
2302	4.0000	92.000	68.000	94.000	4460.0	0.0058	AMC	Y	N
2303	4.0000	92.000	87.000	158.00	4460.0	0.0077	AMC	Y	N
2304	4.0000	92.000	295.00	4.0000	4460.0	0.0099	AMC	Y	N
2305	5.0000	92.000	807.00	0.0000	3278.0	0.0348	AMC	Y	N
2306	5.0000	92.000	1331.0	0.0000	3278.0	0.0378	AMC	Y	N
2307	5.0000	92.000	1478.0	0.0000	3278.0	0.0365	AMC	Y	N
2308	5.0000	92.000	1519.0	0.0000	3278.0	0.0408	AMC	Y	N
2309	5.0000	92.000	1291.0	0.0000	3278.0	0.0348	AMC	Y	N
2310	5.0000	92.000	1070.0	0.0000	3278.0	0.0321	AMC	Y	N
2311	5.0000	92.000	771.00	3.0000	3278.0	0.0317	AMC	Y	N
2312	5.0000	92.000	269.00	40.000	3278.0	0.0201	AMC	Y	N
2313	5.0000	92.000	163.00	35.000	3278.0	0.0179	AMC	Y	N
2314	5.0000	92.000	118.00	26.000	3278.0	0.0200	AMC	Y	N
2315	5.0000	92.000	107.00	72.000	3278.0	0.0187	AMC	Y	N
2316	5.0000	92.000	337.00	4.0000	3278.0	0.0187	AMC	Y	N
2317	6.0000	92.000	306.00	19.000	2436.0	0.0169	AMC	Y	N
2318	6.0000	92.000	806.00	0.0000	2436.0	0.0251	AMC	Y	N
2319	6.0000	92.000	987.00	0.0000	2436.0	0.0297	AMC	Y	N
2320	6.0000	92.000	1101.0	0.0000	2436.0	0.0196	AMC	Y	N
2321	6.0000	92.000	841.00	0.0000	2436.0	0.0292	AMC	Y	N
2322	6.0000	92.000	791.00	0.0000	2436.0	0.0293	AMC	Y	N
2323	6.0000	92.000	498.00	3.0000	2436.0	0.0213	AMC	Y	N
2324	6.0000	92.000	200.00	48.000	2436.0	0.0139	AMC	Y	N
2325	6.0000	92.000	54.000	111.00	2436.0	0.0169	AMC	Y	N
2326	6.0000	92.000	5.0000	215.00	2436.0	0.0135	AMC	Y	N
2327	6.0000	92.000	26.000	111.00	2436.0	0.0122	AMC	Y	N
2328	6.0000	92.000	117.00	71.000	2436.0	0.0117	AMC	Y	N

2329	7.0000	92.000	52.000	277.00	3214.0	0.0075	AMC	Y	N
2330	7.0000	92.000	144.00	50.000	3214.0	0.0078	AMC	Y	N
2331	7.0000	92.000	295.00	0.0000	3214.0	0.0097	AMC	Y	N
2332	7.0000	92.000	306.00	0.0000	3214.0	0.0111	AMC	Y	N
2333	7.0000	92.000	146.00	9.0000	3214.0	0.0091	AMC	Y	N
2334	7.0000	92.000	314.00	0.0000	3214.0	0.0093	AMC	Y	N
2335	7.0000	92.000	64.000	87.000	3214.0	0.0070	AMC	Y	N
2336	7.0000	92.000	0.0000	133.00	3214.0	0.0065	AMC	Y	N
2337	7.0000	92.000	4.0000	200.00	3214.0	0.0065	AMC	Y	N
2338	7.0000	92.000	0.0000	377.00	3214.0	0.0068	AMC	Y	N
2339	7.0000	92.000	0.0000	529.00	3214.0	0.0069	AMC	Y	N
2340	7.0000	92.000	0.0000	468.00	3214.0	0.0073	AMC	Y	N
2341	8.0000	92.000	442.00	0.0000	3630.0	0.0090	AMC	Y	N
2342	8.0000	92.000	570.00	0.0000	3630.0	0.0116	AMC	Y	N
2343	8.0000	92.000	713.00	0.0000	3630.0	0.0152	AMC	Y	N
2344	8.0000	92.000	707.00	0.0000	3630.0	0.0155	AMC	Y	N
2345	8.0000	92.000	565.00	0.0000	3630.0	0.0143	AMC	Y	N
2346	8.0000	92.000	539.00	0.0000	3630.0	0.0129	AMC	Y	N
2347	8.0000	92.000	410.00	0.0000	3630.0	0.0117	AMC	Y	N
2348	8.0000	92.000	215.00	9.0000	3630.0	0.0093	AMC	Y	N
2349	8.0000	92.000	70.000	59.000	3630.0	0.0074	AMC	Y	N
2350	8.0000	92.000	32.000	59.000	3630.0	0.0072	AMC	Y	N
2351	8.0000	92.000	41.000	63.000	3630.0	0.0071	AMC	Y	N
2352	8.0000	92.000	191.00	6.0000	3630.0	0.0088	AMC	Y	N
2353	9.0000	92.000	224.00	100.00	2187.0	0.0086	AMC	Y	N
2354	9.0000	92.000	723.00	0.0000	2187.0	0.0188	AMC	Y	N
2355	9.0000	92.000	758.00	0.0000	2187.0	0.0183	AMC	Y	N
2356	9.0000	92.000	776.00	0.0000	2187.0	0.0185	AMC	Y	N
2357	9.0000	92.000	540.00	0.0000	2187.0	0.0146	AMC	Y	N
2358	9.0000	92.000	437.00	4.0000	2187.0	0.0140	AMC	Y	N
2359	9.0000	92.000	228.00	31.000	2187.0	0.0090	AMC	Y	N
2360	9.0000	92.000	90.000	95.000	2187.0	0.0071	AMC	Y	N
2361	9.0000	92.000	6.0000	215.00	2187.0	0.0073	AMC	Y	N
2362	9.0000	92.000	0.0000	463.00	2187.0	0.0076	AMC	Y	N
2363	9.0000	92.000	1.0000	276.00	2187.0	0.0075	AMC	Y	N
2364	9.0000	92.000	19.000	224.00	2187.0	0.0073	AMC	Y	N
2365	10.000	92.000	276.00	23.000	4193.0	0.0115	AMC	Y	N
2366	10.000	92.000	556.00	3.0000	4193.0	0.0181	AMC	Y	N
2367	10.000	92.000	766.00	0.0000	4193.0	0.0229	AMC	Y	N
2368	10.000	92.000	933.00	0.0000	4193.0	0.0247	AMC	Y	N
2369	10.000	92.000	835.00	0.0000	4193.0	0.0242	AMC	Y	N
2370	10.000	92.000	766.00	0.0000	4193.0	0.0230	AMC	Y	N
2371	10.000	92.000	461.00	6.0000	4193.0	0.0175	AMC	Y	N
2372	10.000	92.000	227.00	25.000	4193.0	0.0098	AMC	Y	N
2373	10.000	92.000	18.000	138.00	4193.0	0.0062	AMC	Y	N
2374	10.000	92.000	2.0000	287.00	4193.0	0.0010	AMC	Y	N
2375	10.000	92.000	1.0000	198.00	4193.0	0.0089	AMC	Y	N
2376	10.000	92.000	68.000	117.00	4193.0	0.0075	AMC	Y	N
2377	11.000	92.000	65.000	277.00	6071.0	0.0069	AMC	Y	N
2378	11.000	92.000	175.00	41.000	6071.0	0.0069	AMC	Y	N
2379	11.000	92.000	320.00	0.0000	6071.0	0.0091	AMC	Y	N
2380	11.000	92.000	335.00	0.0000	6071.0	0.0096	AMC	Y	N
2381	11.000	92.000	212.00	5.0000	6071.0	0.0084	AMC	Y	N
2382	11.000	92.000	238.00	0.0000	6071.0	0.0086	AMC	Y	N
2383	11.000	92.000	45.000	97.000	6071.0	0.0069	AMC	Y	N
2384	11.000	92.000	1.0000	184.00	6071.0	0.0058	AMC	Y	N
2385	11.000	92.000	3.0000	236.00	6071.0	0.0052	AMC	Y	N
2386	11.000	92.000	0.0000	445.00	6071.0	0.0062	AMC	Y	N
2387	11.000	92.000	0.0000	540.00	6071.0	0.0062	AMC	Y	N
2388	11.000	92.000	0.0000	406.00	6071.0	0.0054	AMC	Y	N
2389	12.000	92.000	507.00	0.0000	2650.0	0.0172	AMC	Y	N
2390	12.000	92.000	908.00	0.0000	2650.0	0.0213	AMC	Y	N
2391	12.000	92.000	1316.0	0.0000	2650.0	0.0236	AMC	Y	N
2392	12.000	92.000	1494.0	0.0000	2650.0	0.0310	AMC	Y	N
2393	12.000	92.000	1323.0	0.0000	2650.0	0.0299	AMC	Y	N
2394	12.000	92.000	1229.0	0.0000	2650.0	0.0303	AMC	Y	N
2395	12.000	92.000	703.00	0.0000	2650.0	0.0224	AMC	Y	N
2396	12.000	92.000	327.00	11.000	2650.0	0.0180	AMC	Y	N
2397	12.000	92.000	103.00	0.0000	2650.0	0.0070	AMC	Y	N
2398	12.000	92.000	66.000	0.0000	2650.0	0.0059	AMC	Y	N
2399	12.000	92.000	54.000	0.0000	2650.0	0.0058	AMC	Y	N

2400	12.000	92.000	260.00	0.0000	2650.0	0.0069	AMC	Y	N
2401	13.000	92.000	91.000	241.00	3952.0	0.0133	AMC	Y	N
2402	13.000	92.000	699.00	3.0000	3952.0	0.0179	AMC	Y	N
2403	13.000	92.000	831.00	0.0000	3952.0	0.0197	AMC	Y	N
2404	13.000	92.000	908.00	0.0000	3952.0	0.0177	AMC	Y	N
2405	13.000	92.000	670.00	0.0000	3952.0	0.0179	AMC	Y	N
2406	13.000	92.000	561.00	0.0000	3952.0	0.0168	AMC	Y	N
2407	13.000	92.000	291.00	30.000	3952.0	0.0130	AMC	Y	N
2408	13.000	92.000	115.00	77.000	3952.0	0.0107	AMC	Y	N
2409	13.000	92.000	10.000	220.00	3952.0	0.0113	AMC	Y	N
2410	13.000	92.000	0.0000	402.00	3952.0	0.0115	AMC	Y	N
2411	13.000	92.000	3.0000	215.00	3952.0	0.0000	AMC	Y	N
2412	13.000	92.000	69.000	149.00	3952.0	0.0107	AMC	Y	N
2413	14.000	92.000	94.000	153.00	6474.0	0.0060	AMC	Y	N
2414	14.000	92.000	307.00	0.0000	6474.0	0.0071	AMC	Y	N
2415	14.000	92.000	613.00	0.0000	6474.0	0.0097	AMC	Y	N
2416	14.000	92.000	704.00	0.0000	6474.0	0.0121	AMC	Y	N
2417	14.000	92.000	390.00	0.0000	6474.0	0.0108	AMC	Y	N
2418	14.000	92.000	318.00	0.0000	6474.0	0.0089	AMC	Y	N
2419	14.000	92.000	95.000	34.000	6474.0	0.0083	AMC	Y	N
2420	14.000	92.000	4.0000	146.00	6474.0	0.0070	AMC	Y	N
2421	14.000	92.000	10.000	136.00	6474.0	0.0060	AMC	Y	N
2422	14.000	92.000	0.0000	320.00	6474.0	0.0063	AMC	Y	N
2423	14.000	92.000	65.000	335.00	6474.0	0.0060	AMC	Y	N
2424	14.000	92.000	0.0000	278.00	6474.0	0.0550	AMC	Y	N
2425	1.0000	91.000	226.00	61.000	5665.0	0.0097	AMC	Y	N
2426	1.0000	91.000	464.00	0.0000	5665.0	0.0166	AMC	Y	N
2427	1.0000	91.000	699.00	0.0000	5665.0	0.0240	AMC	Y	N
2428	1.0000	91.000	920.00	0.0000	5665.0	0.0302	AMC	Y	N
2429	1.0000	91.000	684.00	0.0000	5665.0	0.0200	AMC	Y	N
2430	1.0000	91.000	570.00	2.0000	5665.0	0.0244	AMC	Y	N
2431	1.0000	91.000	298.00	31.000	5665.0	0.0156	AMC	Y	N
2432	1.0000	91.000	65.000	190.00	5665.0	0.0110	AMC	Y	N
2433	1.0000	91.000	22.000	235.00	5665.0	0.0094	AMC	Y	N
2434	1.0000	91.000	0.0000	389.00	5665.0	0.0101	AMC	Y	N
2435	1.0000	91.000	0.0000	344.00	5665.0	0.0064	AMC	Y	N
2436	1.0000	91.000	70.000	122.00	5665.0	0.0142	AMC	Y	N
2437	2.0000	91.000	65.000	238.00	2950.0	0.0088	AMC	Y	N
2438	2.0000	91.000	152.00	24.000	2950.0	0.0124	AMC	Y	N
2439	2.0000	91.000	280.00	21.000	2950.0	0.0158	AMC	Y	N
2440	2.0000	91.000	432.00	0.0000	2950.0	0.0184	AMC	Y	N
2441	2.0000	91.000	293.00	20.000	2950.0	0.0148	AMC	Y	N
2442	2.0000	91.000	185.00	52.000	2950.0	0.0146	AMC	Y	N
2443	2.0000	91.000	34.000	118.00	2950.0	0.0065	AMC	Y	N
2444	2.0000	91.000	0.0000	356.00	2950.0	0.0065	AMC	Y	N
2445	2.0000	91.000	0.0000	426.00	2950.0	0.0067	AMC	Y	N
2446	2.0000	91.000	0.0000	584.00	2950.0	0.0069	AMC	Y	N
2447	2.0000	91.000	0.0000	531.00	2950.0	0.0070	AMC	Y	N
2448	2.0000	91.000	0.0000	379.00	2950.0	0.0052	AMC	Y	N
2449	3.0000	91.000	186.00	84.000	3405.0	0.0117	AMC	Y	N
2450	3.0000	91.000	461.00	0.0000	3405.0	0.0195	AMC	Y	N
2451	3.0000	91.000	669.00	0.0000	3405.0	0.0237	AMC	Y	N
2452	3.0000	91.000	888.00	0.0000	3405.0	0.0308	AMC	Y	N
2453	3.0000	91.000	687.00	0.0000	3405.0	0.0248	AMC	Y	N
2454	3.0000	91.000	585.00	1.0000	3405.0	0.0235	AMC	Y	N
2455	3.0000	91.000	322.00	22.000	3405.0	0.0161	AMC	Y	N
2456	3.0000	91.000	74.000	187.00	3405.0	0.0086	AMC	Y	N
2457	3.0000	91.000	10.000	153.00	3405.0	0.0091	AMC	Y	N
2458	3.0000	91.000	0.0000	396.00	3405.0	0.0098	AMC	Y	N
2459	3.0000	91.000	0.0000	365.00	3405.0	0.0097	AMC	Y	N
2460	3.0000	91.000	59.000	132.00	3405.0	0.0085	AMC	Y	N
2461	4.0000	91.000	673.00	0.0000	4460.0	0.0148	AMC	Y	N
2462	4.0000	91.000	834.00	0.0000	4460.0	0.0212	AMC	Y	N
2463	4.0000	91.000	1421.0	0.0000	4460.0	0.0234	AMC	Y	N
2464	4.0000	91.000	0.0000	0.0000	4460.0	0.0268	AMC	Y	N
2465	4.0000	91.000	0.0000	0.0000	4460.0	0.0194	AMC	Y	N
2466	4.0000	91.000	0.0000	0.0000	4460.0	0.0200	AMC	Y	N
2467	4.0000	91.000	0.0000	0.0000	4460.0	0.0161	AMC	Y	N
2468	4.0000	91.000	0.0000	0.0000	4460.0	0.0123	AMC	Y	N
2469	4.0000	91.000	277.00	1.0000	4460.0	0.0084	AMC	Y	N
2470	4.0000	91.000	23.000	128.00	4460.0	0.0076	AMC	Y	N

2471	4.0000	91.000	0.0000	0.0000	4460.0	0.0077	AMC	Y	N
2472	4.0000	91.000	0.0000	0.0000	4460.0	0.0071	AMC	Y	N
2473	5.0000	91.000	687.00	0.0000	3302.0	0.0294	AMC	Y	N
2474	5.0000	91.000	1099.0	0.0000	3302.0	0.0333	AMC	Y	N
2475	5.0000	91.000	1756.0	0.0000	3302.0	0.0436	AMC	Y	N
2476	5.0000	91.000	1881.0	0.0000	3302.0	0.0415	AMC	Y	N
2477	5.0000	91.000	1278.0	0.0000	3302.0	0.0349	AMC	Y	N
2478	5.0000	91.000	1169.0	0.0000	3302.0	0.0160	AMC	Y	N
2479	5.0000	91.000	666.00	0.0000	3302.0	0.0287	AMC	Y	N
2480	5.0000	91.000	0.0000	0.0000	3302.0	0.0283	AMC	Y	N
2481	5.0000	91.000	21.000	116.00	3302.0	0.0233	AMC	Y	N
2482	5.0000	91.000	12.000	133.00	3302.0	0.0211	AMC	Y	N
2483	5.0000	91.000	17.000	186.00	3302.0	0.0160	AMC	Y	N
2484	5.0000	91.000	294.00	36.000	3302.0	0.0229	AMC	Y	N
2485	6.0000	91.000	309.00	26.000	2088.0	0.0269	AMC	Y	N
2486	6.0000	91.000	605.00	1.0000	2088.0	0.0309	AMC	Y	N
2487	6.0000	91.000	1028.0	0.0000	2088.0	0.0334	AMC	Y	N
2488	6.0000	91.000	1243.0	0.0000	2088.0	0.0434	AMC	Y	N
2489	6.0000	91.000	887.00	0.0000	2088.0	0.0272	AMC	Y	N
2490	6.0000	91.000	739.00	0.0000	2088.0	0.0355	AMC	Y	N
2491	6.0000	91.000	335.00	10.000	2088.0	0.0229	AMC	Y	N
2492	6.0000	91.000	168.00	180.00	2088.0	0.0170	AMC	Y	N
2493	6.0000	91.000	2.0000	277.00	2088.0	0.0177	AMC	Y	N
2494	6.0000	91.000	0.0000	318.00	2088.0	0.0144	AMC	Y	N
2495	6.0000	91.000	1.0000	245.00	2088.0	0.0151	AMC	Y	N
2496	6.0000	91.000	145.00	143.00	2088.0	0.0137	AMC	Y	N
2497	7.0000	91.000	1.0000	159.00	3208.0	0.0069	AMC	Y	N
2498	7.0000	91.000	149.00	20.000	3208.0	0.0082	AMC	Y	N
2499	7.0000	91.000	425.00	3.0000	3208.0	0.0111	AMC	Y	N
2500	7.0000	91.000	352.00	0.0000	3208.0	0.0112	AMC	Y	N
2501	7.0000	91.000	154.00	3.0000	3208.0	0.0089	AMC	Y	N
2502	7.0000	91.000	403.00	0.0000	3208.0	0.0109	AMC	Y	N
2503	7.0000	91.000	149.00	21.000	3208.0	0.0077	AMC	Y	N
2504	7.0000	91.000	89.000	55.000	3208.0	0.0069	AMC	Y	N
2505	7.0000	91.000	1.0000	122.00	3208.0	0.0067	AMC	Y	N
2506	7.0000	91.000	0.0000	322.00	3208.0	0.0083	AMC	Y	N
2507	7.0000	91.000	0.0000	398.00	3208.0	0.0082	AMC	Y	N
2508	7.0000	91.000	0.0000	368.00	3208.0	0.0077	AMC	Y	N
2509	8.0000	91.000	455.00	0.0000	3656.0	0.0093	AMC	Y	N
2510	8.0000	91.000	579.00	0.0000	3656.0	0.0129	AMC	Y	N
2511	8.0000	91.000	950.00	0.0000	3656.0	0.0149	AMC	Y	N
2512	8.0000	91.000	820.00	0.0000	3656.0	0.0117	AMC	Y	N
2513	8.0000	91.000	512.00	0.0000	3656.0	0.0139	AMC	Y	N
2514	8.0000	91.000	684.00	0.0000	3656.0	0.0133	AMC	Y	N
2515	8.0000	91.000	498.00	0.0000	3656.0	0.0125	AMC	Y	N
2516	8.0000	91.000	345.00	0.0000	3656.0	0.0107	AMC	Y	N
2517	8.0000	91.000	210.00	1.0000	3656.0	0.0099	AMC	Y	N
2518	8.0000	91.000	30.000	64.000	3656.0	0.0115	AMC	Y	N
2519	8.0000	91.000	41.000	103.00	3656.0	0.0068	AMC	Y	N
2520	8.0000	91.000	141.00	12.000	3656.0	0.0089	AMC	Y	N
2521	9.0000	91.000	225.00	44.000	2766.0	0.0082	AMC	Y	N
2522	9.0000	91.000	413.00	13.000	2766.0	0.0124	AMC	Y	N
2523	9.0000	91.000	1055.0	0.0000	2766.0	0.0204	AMC	Y	N
2524	9.0000	91.000	1104.0	0.0000	2766.0	0.0230	AMC	Y	N
2525	9.0000	91.000	532.00	0.0000	2766.0	0.0153	AMC	Y	N
2526	9.0000	91.000	448.00	17.000	2766.0	0.0158	AMC	Y	N
2527	9.0000	91.000	33.000	183.00	2766.0	0.0077	AMC	Y	N
2528	9.0000	91.000	49.000	235.00	2766.0	0.0075	AMC	Y	N
2529	9.0000	91.000	0.0000	418.00	2766.0	0.0078	AMC	Y	N
2530	9.0000	91.000	0.0000	569.00	2766.0	0.0067	AMC	Y	N
2531	9.0000	91.000	0.0000	489.00	2766.0	0.0063	AMC	Y	N
2532	9.0000	91.000	65.000	233.00	2766.0	0.0055	AMC	Y	N
2533	10.000	91.000	217.00	85.000	4193.0	0.0078	AMC	Y	N
2534	10.000	91.000	486.00	1.0000	4193.0	0.0146	AMC	Y	N
2535	10.000	91.000	731.00	0.0000	4193.0	0.0222	AMC	Y	N
2536	10.000	91.000	989.00	0.0000	4193.0	0.0248	AMC	Y	N
2537	10.000	91.000	930.00	0.0000	4193.0	0.0248	AMC	Y	N
2538	10.000	91.000	633.00	2.0000	4193.0	0.0203	AMC	Y	N
2539	10.000	91.000	368.00	23.000	4193.0	0.0162	AMC	Y	N
2540	10.000	91.000	87.000	172.00	4193.0	0.0099	AMC	Y	N
2541	10.000	91.000	11.000	147.00	4193.0	0.0099	AMC	Y	N

2542	10.000	91.000	0.0000	357.00	4193.0	0.0083	AMC	Y	N
2543	10.000	91.000	0.0000	232.00	4193.0	0.0068	AMC	Y	N
2544	10.000	91.000	90.000	126.00	4193.0	0.0099	AMC	Y	N
2545	11.000	91.000	2.0000	165.00	5914.0	0.0063	AMC	Y	N
2546	11.000	91.000	173.00	17.000	5914.0	0.0066	AMC	Y	N
2547	11.000	91.000	447.00	0.0000	5914.0	0.0100	AMC	Y	N
2548	11.000	91.000	324.00	0.0000	5914.0	0.0098	AMC	Y	N
2549	11.000	91.000	140.00	5.0000	5914.0	0.0078	AMC	Y	N
2550	11.000	91.000	372.00	0.0000	5914.0	0.0088	AMC	Y	N
2551	11.000	91.000	134.00	14.000	5914.0	0.0068	AMC	Y	N
2552	11.000	91.000	81.000	59.000	5914.0	0.0059	AMC	Y	N
2553	11.000	91.000	1.0000	154.00	5914.0	0.0056	AMC	Y	N
2554	11.000	91.000	0.0000	369.00	5914.0	0.0066	AMC	Y	N
2555	11.000	91.000	0.0000	420.00	5914.0	0.0064	AMC	Y	N
2556	11.000	91.000	0.0000	383.00	5914.0	0.0068	AMC	Y	N
2557	12.000	91.000	508.00	0.0000	2641.0	0.0187	AMC	Y	N
2558	12.000	91.000	786.00	0.0000	2641.0	0.0234	AMC	Y	N
2559	12.000	91.000	1144.0	0.0000	2641.0	0.0281	AMC	Y	N
2560	12.000	91.000	990.00	0.0000	2641.0	0.0264	AMC	Y	N
2561	12.000	91.000	538.00	0.0000	2641.0	0.0246	AMC	Y	N
2562	12.000	91.000	243.00	0.0000	2641.0	0.0159	AMC	Y	N
2563	12.000	91.000	41.000	101.00	2641.0	0.0067	AMC	Y	N
2564	12.000	91.000	3.0000	182.00	2641.0	0.0066	AMC	Y	N
2565	12.000	91.000	22.000	0.0000	2641.0	0.0056	AMC	Y	N
2566	12.000	91.000	290.00	0.0000	2641.0	0.0071	AMC	Y	N
2567	13.000	91.000	307.00	17.000	2641.0	0.0120	AMC	Y	N
2568	13.000	91.000	428.00	5.0000	2641.0	0.0169	AMC	Y	N
2569	13.000	91.000	946.00	0.0000	3911.0	0.0206	AMC	Y	N
2570	13.000	91.000	1131.0	0.0000	3911.0	0.0230	AMC	Y	N
2571	13.000	91.000	695.00	0.0000	3911.0	0.0191	AMC	Y	N
2572	13.000	91.000	505.00	10.000	3911.0	0.0169	AMC	Y	N
2573	13.000	91.000	179.00	34.000	3911.0	0.0128	AMC	Y	N
2574	13.000	91.000	35.000	232.00	3911.0	0.0134	AMC	Y	N
2575	13.000	91.000	0.0000	383.00	3911.0	0.0154	AMC	Y	N
2576	13.000	91.000	0.0000	419.00	3911.0	0.0155	AMC	Y	N
2577	13.000	91.000	0.0000	383.00	3911.0	0.0149	AMC	Y	N
2578	13.000	91.000	91.000	241.00	3911.0	0.0138	AMC	Y	N
2579	14.000	91.000	35.000	57.000	3911.0	0.0056	AMC	Y	N
2580	14.000	91.000	344.00	0.0000	3911.0	0.0060	AMC	Y	N
2581	14.000	91.000	770.00	0.0000	6474.0	0.0109	AMC	Y	N
2582	14.000	91.000	556.00	0.0000	6474.0	0.0125	AMC	Y	N
2583	14.000	91.000	287.00	0.0000	6474.0	0.0098	AMC	Y	N
2584	14.000	91.000	459.00	0.0000	6474.0	0.0095	AMC	Y	N
2585	14.000	91.000	244.00	1.0000	6474.0	0.0101	AMC	Y	N
2586	14.000	91.000	185.00	14.000	6474.0	0.0081	AMC	Y	N
2587	14.000	91.000	46.000	66.000	6474.0	0.0074	AMC	Y	N
2588	14.000	91.000	0.0000	248.00	6474.0	0.0060	AMC	Y	N
2589	14.000	91.000	0.0000	205.00	6474.0	0.0058	AMC	Y	N
2590	14.000	91.000	3.0000	224.00	6474.0	0.0062	AMC	Y	N
2591	81.000	94.000	679.00	0.0000	5735.0	0.0146	AFA	N	N
2592	81.000	94.000	969.00	0.0000	5735.0	0.0181	AFA	N	N
2593	81.000	94.000	1011.0	0.0000	5735.0	0.0185	AFA	N	N
2594	81.000	94.000	1059.0	0.0000	5735.0	0.0185	AFA	N	N
2595	81.000	94.000	941.00	0.0000	5735.0	0.0181	AFA	N	N
2596	81.000	94.000	808.00	0.0000	5735.0	0.0167	AFA	N	N
2597	81.000	94.000	651.00	0.0000	5735.0	0.0157	AFA	N	N
2598	81.000	94.000	291.00	0.0000	5735.0	0.0120	AFA	N	N
2599	81.000	94.000	5.0000	137.00	5735.0	0.0067	AFA	N	N
2600	81.000	94.000	34.000	80.000	5735.0	0.0084	AFA	N	N
2601	81.000	94.000	32.000	118.00	5735.0	0.0079	AFA	N	N
2602	81.000	94.000	197.00	13.000	5735.0	0.0092	AFA	N	N
2603	81.000	93.000	421.00	0.0000	5813.0	0.0130	AFA	N	N
2604	81.000	93.000	958.00	0.0000	5813.0	0.0168	AFA	N	N
2605	81.000	93.000	1034.0	0.0000	5813.0	0.0196	AFA	N	N
2606	81.000	93.000	1185.0	0.0000	5813.0	0.0196	AFA	N	N
2607	81.000	93.000	1019.0	0.0000	5813.0	0.0178	AFA	N	N
2608	81.000	93.000	889.00	0.0000	5813.0	0.0177	AFA	N	N
2609	81.000	93.000	677.00	0.0000	5813.0	0.0147	AFA	N	N
2610	81.000	93.000	407.00	0.0000	5813.0	0.0124	AFA	N	N
2611	81.000	93.000	0.0000	0.0000	5813.0	0.0076	AFA	N	N
2612	81.000	93.000	14.000	93.000	5813.0	0.0073	AFA	N	N

2613	81.000	93.000	82.000	28.000	5813.0	0.0078	AFA	N N
2614	81.000	93.000	339.00	0.0000	5813.0	0.0105	AFA	N N
2615	81.000	92.000	650.00	0.0000	5682.0	0.0144	AFA	N N
2616	81.000	92.000	1054.0	0.0000	5682.0	0.0184	AFA	N N
2617	81.000	92.000	1142.0	0.0000	5682.0	0.0186	AFA	N N
2618	81.000	92.000	1148.0	0.0000	5682.0	0.0195	AFA	N N
2619	81.000	92.000	939.00	0.0000	5682.0	0.0173	AFA	N N
2620	81.000	92.000	930.00	0.0000	5682.0	0.0169	AFA	N N
2621	81.000	92.000	569.00	0.0000	5682.0	0.0140	AFA	N N
2622	81.000	92.000	446.00	0.0000	5682.0	0.0011	AFA	N N
2623	81.000	92.000	271.00	0.0000	5682.0	0.0088	AFA	N N
2624	81.000	92.000	83.000	53.000	5682.0	0.0071	AFA	N N
2625	81.000	92.000	79.000	71.000	5682.0	0.0086	AFA	N N
2626	81.000	92.000	148.00	23.000	5682.0	0.0098	AFA	N N
2627	81.000	91.000	621.00	0.0000	5572.0	0.0144	AFA	N N
2628	81.000	91.000	783.00	0.0000	5572.0	0.0158	AFA	N N
2629	81.000	91.000	1333.0	0.0000	5572.0	0.0194	AFA	N N
2630	81.000	91.000	1269.0	0.0000	5572.0	0.0207	AFA	N N
2631	81.000	91.000	921.00	0.0000	5572.0	0.0158	AFA	N N
2632	81.000	91.000	991.00	0.0000	5572.0	0.0169	AFA	N N
2633	81.000	91.000	821.00	0.0000	5572.0	0.0150	AFA	N N
2634	81.000	91.000	487.00	0.0000	5572.0	0.0117	AFA	N N
2635	81.000	91.000	39.000	29.000	5572.0	0.0065	AFA	N N
2636	81.000	91.000	100.00	43.000	5572.0	0.0077	AFA	N N
2637	81.000	91.000	105.00	9.0000	5572.0	0.0081	AFA	N N
2638	81.000	91.000	340.00	0.0000	5572.0	0.0104	AFA	N N
2639	82.000	94.000	0.0000	0.0000	1804.0	0.0096	AFDW	N N
2640	82.000	94.000	0.0000	0.0000	1804.0	0.0128	AFDW	N N
2641	82.000	94.000	0.0000	0.0000	1804.0	0.0168	AFDW	N N
2642	82.000	94.000	0.0000	0.0000	1804.0	0.0211	AFDW	N N
2643	82.000	94.000	0.0000	0.0000	1804.0	0.0173	AFDW	N N
2644	82.000	94.000	0.0000	0.0000	1804.0	0.0160	AFDW	N N
2645	82.000	94.000	0.0000	0.0000	1804.0	0.0129	AFDW	N N
2646	82.000	94.000	0.0000	0.0000	1804.0	0.0109	AFDW	N N
2647	82.000	94.000	0.0000	0.0000	1804.0	0.0126	AFDW	N N
2648	82.000	94.000	0.0000	0.0000	1804.0	0.0119	AFDW	N N
2649	82.000	94.000	0.0000	0.0000	1804.0	0.0102	AFDW	N N
2650	82.000	94.000	0.0000	0.0000	1804.0	0.0102	AFDW	N N
2651	82.000	93.000	0.0000	0.0000	2911.0	0.0110	AFDW	N N
2652	82.000	93.000	0.0000	0.0000	2911.0	0.0144	AFDW	N N
2653	82.000	93.000	0.0000	0.0000	2911.0	0.0166	AFDW	N N
2654	82.000	93.000	0.0000	0.0000	2911.0	0.0175	AFDW	N N
2655	82.000	93.000	0.0000	0.0000	2911.0	0.0154	AFDW	N N
2656	82.000	93.000	0.0000	0.0000	2911.0	0.0150	AFDW	N N
2657	82.000	93.000	0.0000	0.0000	2911.0	0.0122	AFDW	N N
2658	82.000	93.000	0.0000	0.0000	2911.0	0.0098	AFDW	N N
2659	82.000	93.000	0.0000	0.0000	2911.0	0.0107	AFDW	N N
2660	82.000	93.000	0.0000	0.0000	2911.0	0.0115	AFDW	N N
2661	82.000	93.000	0.0000	0.0000	2911.0	0.0110	AFDW	N N
2662	82.000	93.000	0.0000	0.0000	2911.0	0.0111	AFDW	N N
2663	82.000	92.000	0.0000	0.0000	2911.0	0.0106	AFDW	N N
2664	82.000	92.000	0.0000	0.0000	2911.0	0.0133	AFDW	N N
2665	82.000	92.000	0.0000	0.0000	2911.0	0.0176	AFDW	N N
2666	82.000	92.000	0.0000	0.0000	2911.0	0.0177	AFDW	N N
2667	82.000	92.000	0.0000	0.0000	2911.0	0.0170	AFDW	N N
2668	82.000	92.000	0.0000	0.0000	2911.0	0.0157	AFDW	N N
2669	82.000	92.000	0.0000	0.0000	2911.0	0.0127	AFDW	N N
2670	82.000	92.000	0.0000	0.0000	2911.0	0.0099	AFDW	N N
2671	82.000	92.000	0.0000	0.0000	2911.0	0.0110	AFDW	N N
2672	82.000	92.000	0.0000	0.0000	2911.0	0.0102	AFDW	N N
2673	82.000	92.000	0.0000	0.0000	2911.0	0.0099	AFDW	N N
2674	82.000	92.000	0.0000	0.0000	2911.0	0.0111	AFDW	N N
2675	82.000	91.000	0.0000	0.0000	2911.0	0.0101	AFDW	N N
2676	82.000	91.000	0.0000	0.0000	2911.0	0.0128	AFDW	N N
2677	82.000	91.000	0.0000	0.0000	2911.0	0.0160	AFDW	N N
2678	82.000	91.000	0.0000	0.0000	2911.0	0.0187	AFDW	N N
2679	82.000	91.000	0.0000	0.0000	2911.0	0.0170	AFDW	N N
2680	82.000	91.000	0.0000	0.0000	2911.0	0.0157	AFDW	N N
2681	82.000	91.000	0.0000	0.0000	2911.0	0.0111	AFDW	N N
2682	82.000	91.000	0.0000	0.0000	2911.0	0.0103	AFDW	N N
2683	82.000	91.000	0.0000	0.0000	2911.0	0.0123	AFDW	N N

2684	82.000	91.000	0.0000	0.0000	2911.0	0.0110	AFDW	N	N
2685	82.000	91.000	0.0000	0.0000	2911.0	0.0102	AFDW	N	N
2686	82.000	91.000	0.0000	0.0000	2911.0	0.0104	AFDW	N	N
2687	83.000	94.000	37.000	170.00	2772.0	0.0074	SOC	Y	N
2688	83.000	94.000	198.00	41.000	2772.0	0.0085	SOC	Y	N
2689	83.000	94.000	280.00	0.0000	2772.0	0.0101	SOC	Y	N
2690	83.000	94.000	474.00	0.0000	2772.0	0.0117	SOC	Y	N
2691	83.000	94.000	251.00	18.000	2772.0	0.0094	SOC	Y	N
2692	83.000	94.000	166.00	38.000	2772.0	0.0087	SOC	Y	N
2693	83.000	94.000	56.000	110.00	2772.0	0.0080	SOC	Y	N
2694	83.000	94.000	1.0000	264.00	2772.0	0.0094	SOC	Y	N
2695	83.000	94.000	0.0000	464.00	2772.0	0.0091	SOC	Y	N
2696	83.000	94.000	0.0000	453.00	2772.0	0.0092	SOC	Y	N
2697	83.000	94.000	0.0000	464.00	2772.0	0.0102	SOC	Y	N
2698	83.000	94.000	0.0000	0.0000	2772.0	0.0091	SOC	Y	N
2699	83.000	93.000	0.0000	0.0000	2630.0	0.0060	SOC	Y	N
2700	83.000	93.000	0.0000	0.0000	2630.0	0.0065	SOC	Y	N
2701	83.000	93.000	0.0000	0.0000	2630.0	0.0075	SOC	Y	N
2702	83.000	93.000	0.0000	0.0000	2630.0	0.0083	SOC	Y	N
2703	83.000	93.000	0.0000	0.0000	2630.0	0.0089	SOC	Y	N
2704	83.000	93.000	0.0000	0.0000	2630.0	0.0085	SOC	Y	N
2705	83.000	93.000	0.0000	0.0000	2630.0	0.0076	SOC	Y	N
2706	83.000	93.000	0.0000	0.0000	2630.0	0.0080	SOC	Y	N
2707	83.000	93.000	0.0000	0.0000	2630.0	0.0082	SOC	Y	N
2708	83.000	93.000	0.0000	0.0000	2630.0	0.0089	SOC	Y	N
2709	83.000	93.000	0.0000	0.0000	2630.0	0.0091	SOC	Y	N
2710	83.000	93.000	0.0000	0.0000	2630.0	0.0083	SOC	Y	N
2711	83.000	92.000	232.00	47.000	2293.0	0.0052	SOC	Y	N
2712	83.000	92.000	328.00	21.000	2293.0	0.0080	SOC	Y	N
2713	83.000	92.000	299.00	21.000	2293.0	0.0095	SOC	Y	N
2714	83.000	92.000	450.00	0.0000	2293.0	0.0101	SOC	Y	N
2715	83.000	92.000	241.00	5.0000	2293.0	0.0086	SOC	Y	N
2716	83.000	92.000	204.00	16.000	2293.0	0.0069	SOC	Y	N
2717	83.000	92.000	91.000	59.000	2293.0	0.0067	SOC	Y	N
2718	83.000	92.000	18.000	186.00	2293.0	0.0051	SOC	Y	N
2719	83.000	92.000	0.0000	417.00	2293.0	0.0071	SOC	Y	N
2720	83.000	92.000	0.0000	533.00	2293.0	0.0071	SOC	Y	N
2721	83.000	92.000	0.0000	427.00	2293.0	0.0069	SOC	Y	N
2722	83.000	92.000	0.0000	373.00	2293.0	0.0065	SOC	Y	N
2723	83.000	91.000	0.0000	0.0000	0.0000	0.0000	SOC	Y	N
2724	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2725	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2726	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2727	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2728	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2729	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2730	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2731	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2732	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2733	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2734	83.000	91.000	M	M	0.0000	0.0000	SOC	Y	N
2735	66.000	91.000	0.0000	0.0000	7037.0	0.0138	SPC	N	N
2736	66.000	91.000	0.0000	0.0000	7037.0	0.0131	SPC	N	N
2737	67.000	94.000	286.00	19.000	2652.0	0.0879	AFMC	N	N
2738	67.000	94.000	573.00	1.0000	2652.0	0.0967	AFMC	N	N
2739	67.000	94.000	861.00	0.0000	2652.0	0.1076	AFMC	N	N
2740	67.000	94.000	1058.0	0.0000	2652.0	0.1219	AFMC	N	N
2741	67.000	94.000	0.0000	0.0000	2652.0	0.1505	AFMC	N	N
2742	67.000	94.000	540.00	0.0000	2652.0	0.1290	AFMC	N	N
2743	67.000	94.000	175.00	20.000	2652.0	0.1168	AFMC	N	N
2744	67.000	94.000	30.000	146.00	2652.0	0.0906	AFMC	N	N
2745	67.000	94.000	0.0000	243.00	2652.0	0.0897	AFMC	N	N
2746	67.000	94.000	0.0000	242.00	2652.0	0.1291	AFMC	N	N
2747	67.000	94.000	0.0000	230.00	2652.0	0.1166	AFMC	N	N
2748	67.000	94.000	49.000	79.000	2652.0	0.0814	AFMC	N	N
2749	68.000	94.000	85.000	267.00	2081.0	0.0112	AFMC	N	N
2750	68.000	94.000	287.00	31.000	2081.0	0.0166	AFMC	N	N
2751	68.000	94.000	323.00	22.000	2081.0	0.0151	AFMC	N	N
2752	68.000	94.000	391.00	8.0000	2081.0	0.0158	AFMC	N	N
2753	68.000	94.000	234.00	34.000	2081.0	0.0132	AFMC	N	N
2754	68.000	94.000	130.00	102.00	2081.0	0.0134	AFMC	N	N

2755	68.000	94.000	28.000	183.00	2081.0	0.0132	AFMC	N	N
2756	68.000	94.000	10.000	357.00	2081.0	0.0141	AFMC	N	N
2757	68.000	94.000	0.0000	593.00	2081.0	0.0133	AFMC	N	N
2758	68.000	94.000	0.0000	715.00	2081.0	0.0128	AFMC	N	N
2759	68.000	94.000	0.0000	659.00	2081.0	0.0143	AFMC	N	N
2760	68.000	94.000	0.0000	410.00	2081.0	0.0121	AFMC	N	N
2761	69.000	94.000	95.000	40.000	6542.0	0.0070	AFMC	Y	N
2762	69.000	94.000	384.00	0.0000	6542.0	0.0119	AFMC	Y	N
2763	69.000	94.000	582.00	0.0000	6542.0	0.0187	AFMC	Y	N
2764	69.000	94.000	591.00	0.0000	6542.0	0.0241	AFMC	Y	N
2765	69.000	94.000	541.00	0.0000	6542.0	0.0177	AFMC	Y	N
2766	69.000	94.000	239.00	0.0000	6542.0	0.0146	AFMC	Y	N
2767	69.000	94.000	154.00	60.000	6542.0	0.0124	AFMC	Y	N
2768	69.000	94.000	65.000	144.00	6542.0	0.0105	AFMC	Y	N
2769	69.000	94.000	3.0000	444.00	6542.0	0.0101	AFMC	Y	N
2770	69.000	94.000	0.0000	401.00	6542.0	0.0114	AFMC	Y	N
2771	69.000	94.000	0.0000	632.00	6542.0	0.0103	AFMC	Y	N
2772	69.000	94.000	36.000	252.00	6542.0	0.0097	AFMC	Y	N
2773	70.000	94.000	49.000	155.00	8366.0	0.0121	AFMC	Y	N
2774	70.000	94.000	259.00	40.000	8366.0	0.0136	AFMC	Y	N
2775	70.000	94.000	463.00	0.0000	8366.0	0.0151	AFMC	Y	N
2776	70.000	94.000	529.00	4.0000	8366.0	0.0163	AFMC	Y	N
2777	70.000	94.000	242.00	10.000	8366.0	0.0131	AFMC	Y	N
2778	70.000	94.000	179.00	31.000	8366.0	0.0126	AFMC	Y	N
2779	70.000	94.000	36.000	140.00	8366.0	0.0106	AFMC	Y	N
2780	70.000	94.000	0.0000	277.00	8366.0	0.0119	AFMC	Y	N
2781	70.000	94.000	0.0000	422.00	8366.0	0.0113	AFMC	Y	N
2782	70.000	94.000	0.0000	442.00	8366.0	0.0112	AFMC	Y	N
2783	70.000	94.000	0.0000	453.00	8366.0	0.0126	AFMC	Y	N
2784	70.000	94.000	0.0000	339.00	8366.0	0.0114	AFMC	Y	N
2785	71.000	94.000	114.00	61.000	12890.0	0.0156	AFMC	Y	Y
2786	71.000	94.000	450.00	7.0000	12890.0	0.0246	AFMC	Y	Y
2787	71.000	94.000	0.0000	0.0000	12890.0	0.0269	AFMC	Y	Y
2788	71.000	94.000	0.0000	0.0000	12890.0	0.0258	AFMC	Y	Y
2789	71.000	94.000	0.0000	0.0000	12890.0	0.0237	AFMC	Y	Y
2790	71.000	94.000	0.0000	0.0000	12890.0	0.0212	AFMC	Y	Y
2791	71.000	94.000	0.0000	0.0000	12890.0	0.0162	AFMC	Y	Y
2792	71.000	94.000	0.0000	0.0000	12890.0	0.0109	AFMC	Y	Y
2793	71.000	94.000	29.000	220.00	12890.0	0.0087	AFMC	Y	Y
2794	71.000	94.000	8.0000	406.00	12890.0	0.0086	AFMC	Y	Y
2795	71.000	94.000	0.0000	395.00	12890.0	0.0089	AFMC	Y	Y
2796	71.000	94.000	41.000	147.00	12890.0	0.0080	AFMC	Y	Y
2797	72.000	94.000	98.000	245.00	16376.0	0.0080	AFMC	N	Y
2798	72.000	94.000	298.00	26.000	16376.0	0.0104	AFMC	N	Y
2799	72.000	94.000	300.00	23.000	16376.0	0.0109	AFMC	N	Y
2800	72.000	94.000	370.00	8.0000	16376.0	0.0125	AFMC	N	Y
2801	72.000	94.000	284.00	27.000	16376.0	0.0108	AFMC	N	Y
2802	72.000	94.000	137.00	82.000	16376.0	0.0101	AFMC	N	Y
2803	72.000	94.000	56.000	139.00	16376.0	0.0085	AFMC	N	Y
2804	72.000	94.000	12.000	297.00	16376.0	0.0089	AFMC	N	Y
2805	72.000	94.000	0.0000	515.00	16376.0	0.0085	AFMC	N	Y
2806	72.000	94.000	0.0000	637.00	16376.0	0.0081	AFMC	N	Y
2807	72.000	94.000	0.0000	572.00	16376.0	0.0090	AFMC	N	Y
2808	72.000	94.000	0.0000	359.00	16376.0	0.0080	AFMC	N	Y
2809	73.000	94.000	284.00	16.000	6497.0	0.0105	AFMC	N	N
2810	73.000	94.000	642.00	0.0000	6497.0	0.0163	AFMC	N	N
2811	73.000	94.000	853.00	0.0000	6497.0	0.0170	AFMC	N	N
2812	73.000	94.000	827.00	0.0000	6497.0	0.0166	AFMC	N	N
2813	73.000	94.000	0.0000	0.0000	6497.0	0.0153	AFMC	N	N
2814	73.000	94.000	0.0000	0.0000	6497.0	0.0120	AFMC	N	N
2815	73.000	94.000	0.0000	0.0000	6497.0	0.0105	AFMC	N	N
2816	73.000	94.000	0.0000	0.0000	6497.0	0.0075	AFMC	N	N
2817	73.000	94.000	0.0000	0.0000	6497.0	0.0071	AFMC	N	N
2818	73.000	94.000	0.0000	0.0000	6497.0	0.0065	AFMC	N	N
2819	73.000	94.000	0.0000	0.0000	6497.0	0.0076	AFMC	N	N
2820	73.000	94.000	0.0000	0.0000	6497.0	0.0076	AFMC	N	N
2821	74.000	94.000	412.00	5.0000	3484.0	0.0192	AFMC	N	N
2822	74.000	94.000	609.00	2.0000	3484.0	0.0250	AFMC	N	N
2823	74.000	94.000	947.00	0.0000	3484.0	0.0293	AFMC	N	N
2824	74.000	94.000	1403.0	0.0000	3484.0	0.0350	AFMC	N	N
2825	74.000	94.000	1208.0	0.0000	3484.0	0.0317	AFMC	N	N

2826	74.000	94.000	989.00	0.0000	3484.0	0.0315	AFMC	N	N
2827	74.000	94.000	580.00	0.0000	3484.0	0.0260	AFMC	N	N
2828	74.000	94.000	377.00	8.0000	3484.0	0.0194	AFMC	N	N
2829	74.000	94.000	53.000	123.00	3484.0	0.0182	AFMC	N	N
2830	74.000	94.000	0.0000	404.00	3484.0	0.0184	AFMC	N	N
2831	74.000	94.000	6.0000	187.00	3484.0	0.0183	AFMC	N	N
2832	74.000	94.000	102.00	30.000	3484.0	0.0175	AFMC	N	N
2833	75.000	94.000	0.0000	0.0000	1618.0	0.0076	AFMC	N	N
2834	75.000	94.000	0.0000	0.0000	1618.0	0.0077	AFMC	N	N
2835	75.000	94.000	0.0000	0.0000	1618.0	0.0095	AFMC	N	N
2836	75.000	94.000	0.0000	0.0000	1618.0	0.0096	AFMC	N	N
2837	75.000	94.000	0.0000	0.0000	1618.0	0.0103	AFMC	N	N
2838	75.000	94.000	0.0000	0.0000	1618.0	0.0088	AFMC	N	N
2839	75.000	94.000	0.0000	0.0000	1618.0	0.0071	AFMC	N	N
2840	75.000	94.000	0.0000	0.0000	1618.0	0.0059	AFMC	N	N
2841	75.000	94.000	0.0000	0.0000	1618.0	0.0072	AFMC	N	N
2842	75.000	94.000	0.0000	0.0000	1618.0	0.0071	AFMC	N	N
2843	75.000	94.000	0.0000	0.0000	1618.0	0.0071	AFMC	N	N
2844	75.000	94.000	0.0000	0.0000	1618.0	0.0068	AFMC	N	N
2845	76.000	94.000	78.000	15.000	11796.0	0.0074	AFMC	N	Y
2846	76.000	94.000	345.00	0.0000	11796.0	0.0099	AFMC	N	Y
2847	76.000	94.000	552.00	0.0000	11796.0	0.0132	AFMC	N	Y
2848	76.000	94.000	464.00	0.0000	11796.0	0.0134	AFMC	N	Y
2849	76.000	94.000	399.00	0.0000	11796.0	0.0129	AFMC	N	Y
2850	76.000	94.000	207.00	1.0000	11796.0	0.0089	AFMC	N	Y
2851	76.000	94.000	83.000	33.000	11796.0	0.0073	AFMC	N	Y
2852	76.000	94.000	33.000	0.0000	11796.0	0.0067	AFMC	N	Y
2853	76.000	94.000	0.0000	328.00	11796.0	0.0108	AFMC	N	Y
2854	76.000	94.000	0.0000	415.00	11796.0	0.0079	AFMC	N	Y
2855	76.000	94.000	0.0000	419.00	11796.0	0.0082	AFMC	N	Y
2856	76.000	94.000	0.0000	276.00	11796.0	0.0078	AFMC	N	Y
2857	77.000	94.000	366.00	2.0000	875.00	0.0246	AFMC	N	N
2858	77.000	94.000	637.00	0.0000	875.00	0.0237	AFMC	N	N
2859	77.000	94.000	989.00	0.0000	875.00	0.0284	AFMC	N	N
2860	77.000	94.000	1351.0	0.0000	875.00	0.0305	AFMC	N	N
2861	77.000	94.000	973.00	0.0000	875.00	0.0279	AFMC	N	N
2862	77.000	94.000	787.00	0.0000	875.00	0.0293	AFMC	N	N
2863	77.000	94.000	340.00	15.000	875.00	0.0255	AFMC	N	N
2864	77.000	94.000	233.00	39.000	875.00	0.0254	AFMC	N	N
2865	77.000	94.000	12.000	286.00	875.00	0.0270	AFMC	N	N
2866	77.000	94.000	0.0000	322.00	875.00	0.0277	AFMC	N	N
2867	77.000	94.000	8.0000	224.00	875.00	0.0284	AFMC	N	N
2868	77.000	94.000	51.000	71.000	875.00	0.0248	AFMC	N	N
2869	78.000	94.000	111.00	89.000	11555.0	0.0098	AFMC	N	N
2870	78.000	94.000	335.00	20.000	11555.0	0.0134	AFMC	N	N
2871	78.000	94.000	592.00	0.0000	11555.0	0.0187	AFMC	N	N
2872	78.000	94.000	684.00	0.0000	11555.0	0.0201	AFMC	N	N
2873	78.000	94.000	373.00	7.0000	11555.0	0.0156	AFMC	N	N
2874	78.000	94.000	223.00	22.000	11555.0	0.0140	AFMC	N	N
2875	78.000	94.000	64.000	94.000	11555.0	0.0097	AFMC	N	N
2876	78.000	94.000	30.000	152.00	11555.0	0.0090	AFMC	N	N
2877	78.000	94.000	0.0000	387.00	11555.0	0.0093	AFMC	N	N
2878	78.000	94.000	0.0000	441.00	11555.0	0.0103	AFMC	N	N
2879	78.000	94.000	0.0000	436.00	11555.0	0.0097	AFMC	N	N
2880	78.000	94.000	0.0000	254.00	11555.0	0.0089	AFMC	N	N
2881	79.000	94.000	245.00	42.000	14979.0	0.0143	AFMC	N	Y
2882	79.000	94.000	559.00	0.0000	14979.0	0.0202	AFMC	N	Y
2883	79.000	94.000	670.00	0.0000	14979.0	0.0231	AFMC	N	Y
2884	79.000	94.000	889.00	0.0000	14979.0	0.2310	AFMC	N	Y
2885	79.000	94.000	0.0000	0.0000	14979.0	0.0157	AFMC	N	Y
2886	79.000	94.000	382.00	22.000	14979.0	0.0321	AFMC	N	Y
2887	79.000	94.000	188.00	66.000	14979.0	0.0166	AFMC	N	Y
2888	79.000	94.000	49.000	155.00	14979.0	0.0166	AFMC	N	Y
2889	79.000	94.000	0.0000	482.00	14979.0	0.0158	AFMC	N	Y
2890	79.000	94.000	0.0000	499.00	14979.0	0.0162	AFMC	N	Y
2891	79.000	94.000	0.0000	501.00	14979.0	0.0165	AFMC	N	Y
2892	79.000	94.000	0.0000	0.0000	14979.0	0.0155	AFMC	N	Y
2893	80.000	94.000	366.00	1.0000	14689.0	0.0160	AFMC	N	N
2894	80.000	94.000	639.00	0.0000	14689.0	0.0252	AFMC	N	N
2895	80.000	94.000	984.00	0.0000	14689.0	0.0295	AFMC	N	N
2896	80.000	94.000	1347.0	0.0000	14689.0	0.0361	AFMC	N	N

2897	80.000	94.000	1023.0	0.0000	14689.0	0.0314	AFMC	N	N
2898	80.000	94.000	792.00	0.0000	14689.0	0.0291	AFMC	N	N
2899	80.000	94.000	338.00	16.000	14689.0	0.0211	AFMC	N	N
2900	80.000	94.000	259.00	35.000	14689.0	0.0133	AFMC	N	N
2901	80.000	94.000	14.000	265.00	14689.0	0.0129	AFMC	N	N
2902	80.000	94.000	0.0000	252.00	14689.0	0.0138	AFMC	N	N
2903	80.000	94.000	0.0000	0.0000	14689.0	0.0122	AFMC	N	N
2904	80.000	94.000	0.0000	0.0000	16489.0	0.0119	AFMC	N	N
2905	67.000	93.000	108.00	21.000	2574.0	0.1024	AFMC	N	N
2906	67.000	93.000	398.00	3.0000	2574.0	0.1101	AFMC	N	N
2907	67.000	93.000	625.00	0.0000	2574.0	0.1027	AFMC	N	N
2908	67.000	93.000	633.00	0.0000	2574.0	0.0859	AFMC	N	N
2909	67.000	93.000	701.00	0.0000	2574.0	0.0759	AFMC	N	N
2910	67.000	93.000	545.00	4.0000	2574.0	0.0865	AFMC	N	N
2911	67.000	93.000	253.00	10.000	2574.0	0.1031	AFMC	N	N
2912	67.000	93.000	43.000	113.00	2574.0	0.1220	AFMC	N	N
2913	67.000	93.000	8.0000	256.00	2574.0	0.1090	AFMC	N	N
2914	67.000	93.000	0.0000	441.00	2574.0	0.0869	AFMC	N	N
2915	67.000	93.000	0.0000	389.00	2574.0	0.0823	AFMC	N	N
2916	67.000	93.000	53.000	115.00	2574.0	0.1013	AFMC	N	N
2917	68.000	93.000	0.0000	267.00	1730.0	0.0140	AFMC	N	N
2918	68.000	93.000	260.00	34.000	1730.0	0.0169	AFMC	N	N
2919	68.000	93.000	287.00	24.000	1730.0	0.0182	AFMC	N	N
2920	68.000	93.000	421.00	1.0000	1730.0	0.0179	AFMC	N	N
2921	68.000	93.000	269.00	7.0000	1730.0	0.0160	AFMC	N	N
2922	68.000	93.000	147.00	45.000	1730.0	0.0195	AFMC	N	N
2923	68.000	93.000	42.000	117.00	1730.0	0.0158	AFMC	N	N
2924	68.000	93.000	0.0000	283.00	1730.0	0.0164	AFMC	N	N
2925	68.000	93.000	0.0000	503.00	1730.0	0.0162	AFMC	N	N
2926	68.000	93.000	0.0000	660.00	1730.0	0.0160	AFMC	N	N
2927	68.000	93.000	0.0000	698.00	1730.0	0.0165	AFMC	N	N
2928	68.000	93.000	0.0000	503.00	1730.0	0.0143	AFMC	N	N
2929	69.000	93.000	52.000	53.000	6542.0	0.0091	AFMC	Y	N
2930	69.000	93.000	423.00	0.0000	6542.0	0.0128	AFMC	Y	N
2931	69.000	93.000	669.00	0.0000	6542.0	0.0190	AFMC	Y	N
2932	69.000	93.000	653.00	0.0000	6542.0	0.0207	AFMC	Y	N
2933	69.000	93.000	484.00	0.0000	6542.0	0.0171	AFMC	Y	N
2934	69.000	93.000	265.00	0.0000	6542.0	0.0149	AFMC	Y	N
2935	69.000	93.000	212.00	22.000	6542.0	0.0112	AFMC	Y	N
2936	69.000	93.000	14.000	131.00	6542.0	0.0106	AFMC	Y	N
2937	69.000	93.000	21.000	315.00	6542.0	0.0091	AFMC	Y	N
2938	69.000	93.000	0.0000	404.00	6542.0	0.0099	AFMC	Y	N
2939	69.000	93.000	0.0000	478.00	6542.0	0.0085	AFMC	Y	N
2940	69.000	93.000	6.0000	243.00	6542.0	0.0084	AFMC	Y	N
2941	70.000	93.000	14.000	98.000	7812.0	0.0117	AFMC	Y	N
2942	70.000	93.000	228.00	33.000	7812.0	0.0132	AFMC	Y	N
2943	70.000	93.000	288.00	11.000	7812.0	0.0162	AFMC	Y	N
2944	70.000	93.000	229.00	6.0000	7812.0	0.0155	AFMC	Y	N
2945	70.000	93.000	323.00	2.0000	7812.0	0.0158	AFMC	Y	N
2946	70.000	93.000	251.00	8.0000	7812.0	0.0148	AFMC	Y	N
2947	70.000	93.000	91.000	25.000	7812.0	0.0127	AFMC	Y	N
2948	70.000	93.000	0.0000	219.00	7812.0	0.0137	AFMC	Y	N
2949	70.000	93.000	0.0000	438.00	7812.0	0.0124	AFMC	Y	N
2950	70.000	93.000	0.0000	551.00	7812.0	0.0128	AFMC	Y	N
2951	70.000	93.000	0.0000	547.00	7812.0	0.0147	AFMC	Y	N
2952	70.000	93.000	0.0000	398.00	7812.0	0.0142	AFMC	Y	N
2953	71.000	93.000	317.00	11.000	12930.0	0.0132	AFMC	Y	Y
2954	71.000	93.000	969.00	0.0000	12930.0	0.0246	AFMC	Y	Y
2955	71.000	93.000	1200.0	0.0000	12930.0	0.0285	AFMC	Y	Y
2956	71.000	93.000	1270.0	0.0000	12930.0	0.0296	AFMC	Y	Y
2957	71.000	93.000	707.00	0.0000	12930.0	0.0258	AFMC	Y	Y
2958	71.000	93.000	734.00	0.0000	12930.0	0.0232	AFMC	Y	Y
2959	71.000	93.000	566.00	0.0000	12930.0	0.0192	AFMC	Y	Y
2960	71.000	93.000	178.00	70.000	12930.0	0.0124	AFMC	Y	Y
2961	71.000	93.000	155.00	56.000	12930.0	0.0087	AFMC	Y	Y
2962	71.000	93.000	45.000	117.00	12930.0	0.0081	AFMC	Y	Y
2963	71.000	93.000	4.0000	179.00	12930.0	0.0093	AFMC	Y	Y
2964	71.000	93.000	114.00	61.000	12930.0	0.0082	AFMC	Y	Y
2965	72.000	93.000	1.0000	225.00	16108.0	0.0076	AFMC	N	Y
2966	72.000	93.000	275.00	29.000	16108.0	0.0101	AFMC	N	Y
2967	72.000	93.000	307.00	24.000	16108.0	0.0120	AFMC	N	Y

2968	72.000	93.000	431.00	1.0000	16108.0	0.0133	AFMC	N	Y
2969	72.000	93.000	270.00	9.0000	16108.0	0.0116	AFMC	N	Y
2970	72.000	93.000	158.00	34.000	16108.0	0.0107	AFMC	N	Y
2971	72.000	93.000	43.000	98.000	16108.0	0.0083	AFMC	N	Y
2972	72.000	93.000	0.0000	263.00	16108.0	0.0075	AFMC	N	Y
2973	72.000	93.000	0.0000	488.00	16108.0	0.0086	AFMC	N	Y
2974	72.000	93.000	0.0000	574.00	16108.0	0.0081	AFMC	N	Y
2975	72.000	93.000	0.0000	622.00	16108.0	0.0088	AFMC	N	Y
2976	72.000	93.000	0.0000	0.0000	16108.0	0.0081	AFMC	N	Y
2977	73.000	93.000	128.00	5.0000	6806.0	0.0081	AFMC	N	N
2978	73.000	93.000	752.00	0.0000	6806.0	0.0140	AFMC	N	N
2979	73.000	93.000	991.00	0.0000	6806.0	0.0184	AFMC	N	N
2980	73.000	93.000	778.00	0.0000	6806.0	0.0162	AFMC	N	N
2981	73.000	93.000	624.00	0.0000	6806.0	0.0149	AFMC	N	N
2982	73.000	93.000	496.00	0.0000	6806.0	0.0123	AFMC	N	N
2983	73.000	93.000	238.00	0.0000	6806.0	0.0107	AFMC	N	N
2984	73.000	93.000	69.000	101.00	6806.0	0.0084	AFMC	N	N
2985	73.000	93.000	3.0000	312.00	6806.0	0.0083	AFMC	N	N
2986	73.000	93.000	0.0000	470.00	6806.0	0.0077	AFMC	N	N
2987	73.000	93.000	0.0000	337.00	6806.0	0.0072	AFMC	N	N
2988	73.000	93.000	15.000	145.00	6806.0	0.0087	AFMC	N	N
2989	74.000	93.000	401.00	4.0000	3656.0	0.0197	AFMC	N	N
2990	74.000	93.000	664.00	0.0000	3656.0	0.0238	AFMC	N	N
2991	74.000	93.000	974.00	0.0000	3656.0	0.0288	AFMC	N	N
2992	74.000	93.000	1023.0	0.0000	3656.0	0.0290	AFMC	N	N
2993	74.000	93.000	1083.0	0.0000	3656.0	0.0297	AFMC	N	N
2994	74.000	93.000	871.00	0.0000	3656.0	0.0291	AFMC	N	N
2995	74.000	93.000	444.00	2.0000	3656.0	0.0209	AFMC	N	N
2996	74.000	93.000	112.00	40.000	3656.0	0.0150	AFMC	N	N
2997	74.000	93.000	35.000	196.00	3656.0	0.0130	AFMC	N	N
2998	74.000	93.000	0.0000	345.00	3656.0	0.0146	AFMC	N	N
2999	74.000	93.000	0.0000	331.00	3656.0	0.0141	AFMC	N	N
3000	74.000	93.000	104.00	99.000	3656.0	0.0154	AFMC	N	N
3001	75.000	93.000	0.0000	0.0000	1618.0	0.0076	AFMC	N	N
3002	75.000	93.000	0.0000	0.0000	1618.0	0.0083	AFMC	N	N
3003	75.000	93.000	0.0000	0.0000	1618.0	0.0122	AFMC	N	N
3004	75.000	93.000	0.0000	0.0000	1618.0	0.0126	AFMC	N	N
3005	75.000	93.000	0.0000	0.0000	1618.0	0.0113	AFMC	N	N
3006	75.000	93.000	0.0000	0.0000	1618.0	0.0097	AFMC	N	N
3007	75.000	93.000	0.0000	0.0000	1618.0	0.0076	AFMC	N	N
3008	75.000	93.000	0.0000	0.0000	1618.0	0.0067	AFMC	N	N
3009	75.000	93.000	0.0000	0.0000	1618.0	0.0076	AFMC	N	N
3010	75.000	93.000	0.0000	0.0000	1618.0	0.0070	AFMC	N	N
3011	75.000	93.000	0.0000	0.0000	1618.0	0.0072	AFMC	N	N
3012	75.000	93.000	0.0000	0.0000	1618.0	0.0071	AFMC	N	N
3013	76.000	93.000	15.000	151.00	11431.0	0.0075	AFMC	N	Y
3014	76.000	93.000	288.00	6.0000	11431.0	0.0097	AFMC	N	Y
3015	76.000	93.000	638.00	0.0000	11431.0	0.0144	AFMC	N	Y
3016	76.000	93.000	692.00	0.0000	11431.0	0.0123	AFMC	N	Y
3017	76.000	93.000	359.00	0.0000	11431.0	0.0120	AFMC	N	Y
3018	76.000	93.000	133.00	3.0000	11431.0	0.0150	AFMC	N	Y
3019	76.000	93.000	188.00	20.000	11431.0	0.0096	AFMC	N	Y
3020	76.000	93.000	16.000	93.000	11431.0	0.0078	AFMC	N	Y
3021	76.000	93.000	14.000	320.00	11431.0	0.0077	AFMC	N	Y
3022	76.000	93.000	0.0000	418.00	11431.0	0.0082	AFMC	N	Y
3023	76.000	93.000	0.0000	377.00	11431.0	0.0080	AFMC	N	Y
3024	76.000	93.000	0.0000	302.00	11431.0	0.0070	AFMC	N	Y
3025	77.000	93.000	403.00	2.0000	868.00	0.0243	AFMC	N	N
3026	77.000	93.000	600.00	0.0000	868.00	0.0225	AFMC	N	N
3027	77.000	93.000	932.00	0.0000	868.00	0.0270	AFMC	N	N
3028	77.000	93.000	942.00	0.0000	868.00	0.0258	AFMC	N	N
3029	77.000	93.000	1034.0	0.0000	868.00	0.0242	AFMC	N	N
3030	77.000	93.000	811.00	0.0000	868.00	0.0293	AFMC	N	N
3031	77.000	93.000	434.00	0.0000	868.00	0.0246	AFMC	N	N
3032	77.000	93.000	130.00	48.000	868.00	0.0233	AFMC	N	N
3033	77.000	93.000	51.000	204.00	868.00	0.0255	AFMC	N	N
3034	77.000	93.000	0.0000	352.00	868.00	0.0239	AFMC	N	N
3035	77.000	93.000	1.0000	343.00	868.00	0.0255	AFMC	N	N
3036	77.000	93.000	84.000	89.000	868.00	0.0228	AFMC	N	N
3037	78.000	93.000	89.000	28.000	12107.0	0.0102	AFMC	N	Y
3038	78.000	93.000	286.00	26.000	12107.0	0.0128	AFMC	N	Y

3039	78.000	93.000	514.00	0.0000	12107.0	0.0191	AFMC	N	Y
3040	78.000	93.000	421.00	0.0000	12107.0	0.0175	AFMC	N	Y
3041	78.000	93.000	460.00	0.0000	12107.0	0.0169	AFMC	N	Y
3042	78.000	93.000	330.00	13.000	12107.0	0.0172	AFMC	N	Y
3043	78.000	93.000	139.00	27.000	12107.0	0.0110	AFMC	N	Y
3044	78.000	93.000	6.0000	230.00	12107.0	0.0096	AFMC	N	Y
3045	78.000	93.000	0.0000	460.00	12107.0	0.0102	AFMC	N	Y
3046	78.000	93.000	0.0000	640.00	12107.0	0.0109	AFMC	N	Y
3047	78.000	93.000	0.0000	513.00	12107.0	0.0115	AFMC	N	Y
3048	78.000	93.000	3.0000	366.00	12107.0	0.0100	AFMC	N	Y
3049	79.000	93.000	117.00	41.000	13890.0	0.0157	AFMC	N	Y
3050	79.000	93.000	573.00	0.0000	13890.0	0.0230	AFMC	N	Y
3051	79.000	93.000	780.00	0.0000	13890.0	0.0279	AFMC	N	Y
3052	79.000	93.000	892.00	0.0000	13890.0	0.0293	AFMC	N	Y
3053	79.000	93.000	736.00	0.0000	13890.0	0.0253	AFMC	N	Y
3054	79.000	93.000	540.00	4.0000	13890.0	0.0261	AFMC	N	Y
3055	79.000	93.000	260.00	16.000	13890.0	0.0199	AFMC	N	Y
3056	79.000	93.000	55.000	80.000	13890.0	0.0159	AFMC	N	Y
3057	79.000	93.000	0.0000	354.00	13890.0	0.0165	AFMC	N	Y
3058	79.000	93.000	0.0000	624.00	13890.0	0.0176	AFMC	N	Y
3059	79.000	93.000	0.0000	0.0000	13890.0	0.0176	AFMC	N	Y
3060	79.000	93.000	0.0000	0.0000	13890.0	0.0161	AFMC	N	Y
3061	80.000	93.000	433.00	0.0000	14689.0	0.0176	AFMC	N	N
3062	80.000	93.000	665.00	0.0000	14689.0	0.0250	AFMC	N	N
3063	80.000	93.000	990.00	0.0000	14689.0	0.0294	AFMC	N	N
3064	80.000	93.000	1036.0	0.0000	14689.0	0.0304	AFMC	N	N
3065	80.000	93.000	1103.0	0.0000	14689.0	0.0317	AFMC	N	N
3066	80.000	93.000	826.00	0.0000	14689.0	0.0290	AFMC	N	N
3067	80.000	93.000	444.00	0.0000	14689.0	0.0235	AFMC	N	N
3068	80.000	93.000	97.000	70.000	14689.0	0.0152	AFMC	N	N
3069	80.000	93.000	40.000	232.00	14689.0	0.0139	AFMC	N	N
3070	80.000	93.000	0.0000	0.0000	14689.0	0.0131	AFMC	N	N
3071	80.000	93.000	0.0000	0.0000	14689.0	0.0140	AFMC	N	N
3072	80.000	93.000	0.0000	0.0000	14689.0	0.0125	AFMC	N	N
3073	67.000	92.000	163.00	48.000	2643.0	0.0506	AFMC	N	N
3074	67.000	92.000	535.00	4.0000	2643.0	0.0540	AFMC	N	N
3075	67.000	92.000	612.00	0.0000	2643.0	0.0628	AFMC	N	N
3076	67.000	92.000	771.00	0.0000	2643.0	0.0629	AFMC	N	N
3077	67.000	92.000	496.00	0.0000	2643.0	0.0560	AFMC	N	N
3078	67.000	92.000	527.00	1.0000	2643.0	0.0589	AFMC	N	N
3079	67.000	92.000	218.00	49.000	2643.0	0.0734	AFMC	N	N
3080	67.000	92.000	74.000	151.00	2643.0	0.0752	AFMC	N	N
3081	67.000	92.000	0.0000	294.00	2643.0	0.0696	AFMC	N	N
3082	67.000	92.000	0.0000	493.00	2643.0	0.0852	AFMC	N	N
3083	67.000	92.000	0.0000	328.00	2643.0	0.0867	AFMC	N	N
3084	67.000	92.000	13.000	254.00	2643.0	0.0981	AFMC	N	N
3085	68.000	92.000	30.000	295.00	1730.0	0.0145	AFMC	N	N
3086	68.000	92.000	271.00	49.000	1730.0	0.0167	AFMC	N	N
3087	68.000	92.000	306.00	20.000	1730.0	0.0207	AFMC	N	N
3088	68.000	92.000	435.00	0.0000	1730.0	0.0193	AFMC	N	N
3089	68.000	92.000	188.00	23.000	1730.0	0.0146	AFMC	N	N
3090	68.000	92.000	91.000	47.000	1730.0	0.0150	AFMC	N	N
3091	68.000	92.000	31.000	158.00	1730.0	0.0140	AFMC	N	N
3092	68.000	92.000	5.0000	281.00	1730.0	0.0141	AFMC	N	N
3093	68.000	92.000	0.0000	531.00	1730.0	0.0162	AFMC	N	N
3094	68.000	92.000	0.0000	618.00	1730.0	0.0152	AFMC	N	N
3095	68.000	92.000	0.0000	542.00	1730.0	0.0148	AFMC	N	N
3096	68.000	92.000	0.0000	508.00	1730.0	0.0159	AFMC	N	N
3097	69.000	92.000	188.00	119.00	6399.0	0.0091	AFMC	Y	N
3098	69.000	92.000	382.00	0.0000	6399.0	0.0109	AFMC	Y	N
3099	69.000	92.000	603.00	0.0000	6399.0	0.0174	AFMC	Y	N
3100	69.000	92.000	673.00	0.0000	6399.0	0.0184	AFMC	Y	N
3101	69.000	92.000	426.00	0.0000	6399.0	0.0185	AFMC	Y	N
3102	69.000	92.000	348.00	0.0000	6399.0	0.0161	AFMC	Y	N
3103	69.000	92.000	42.000	64.000	6399.0	0.0140	AFMC	Y	N
3104	69.000	92.000	0.0000	225.00	6399.0	0.0111	AFMC	Y	N
3105	69.000	92.000	5.0000	294.00	6399.0	0.0086	AFMC	Y	N
3106	69.000	92.000	0.0000	487.00	6399.0	0.0082	AFMC	Y	N
3107	69.000	92.000	0.0000	0.0000	6399.0	0.0088	AFMC	Y	N
3108	69.000	92.000	0.0000	326.00	6399.0	0.0098	AFMC	Y	N
3109	70.000	92.000	29.000	170.00	7742.0	0.0134	AFMC	Y	N

3110	70.000	92.000	291.00	22.000	7742.0	0.0161	AFMC	Y N
3111	70.000	92.000	295.00	16.000	7742.0	0.0153	AFMC	Y N
3112	70.000	92.000	437.00	6.0000	7742.0	0.0170	AFMC	Y N
3113	70.000	92.000	239.00	9.0000	7742.0	0.0147	AFMC	Y N
3114	70.000	92.000	174.00	14.000	7742.0	0.0150	AFMC	Y N
3115	70.000	92.000	71.000	85.000	7742.0	0.0133	AFMC	Y N
3116	70.000	92.000	18.000	217.00	7742.0	0.0131	AFMC	Y N
3117	70.000	92.000	0.0000	415.00	7742.0	0.0133	AFMC	Y N
3118	70.000	92.000	0.0000	527.00	7742.0	0.0144	AFMC	Y N
3119	70.000	92.000	0.0000	439.00	7742.0	0.0126	AFMC	Y N
3120	70.000	92.000	0.0000	359.00	7742.0	0.0131	AFMC	Y N
3121	71.000	92.000	392.00	1.0000	13134.0	0.0133	AFMC	Y Y
3122	71.000	92.000	823.00	0.0000	13134.0	0.0240	AFMC	Y Y
3123	71.000	92.000	1154.0	0.0000	13134.0	0.0286	AFMC	Y Y
3124	71.000	92.000	1211.0	0.0000	13134.0	0.0286	AFMC	Y Y
3125	71.000	92.000	797.00	0.0000	13134.0	0.0228	AFMC	Y Y
3126	71.000	92.000	562.00	0.0000	13134.0	0.0198	AFMC	Y Y
3127	71.000	92.000	299.00	11.000	13134.0	0.0145	AFMC	Y Y
3128	71.000	92.000	103.00	46.000	13134.0	0.0090	AFMC	Y Y
3129	71.000	92.000	60.000	154.00	13134.0	0.0082	AFMC	Y Y
3130	71.000	92.000	25.000	31.000	13134.0	0.0076	AFMC	Y Y
3131	71.000	92.000	25.000	351.00	13134.0	0.0080	AFMC	Y Y
3132	71.000	92.000	65.000	58.000	13134.0	0.0083	AFMC	Y Y
3133	72.000	92.000	29.000	292.00	14456.0	0.0102	AFMC	N Y
3134	72.000	92.000	269.00	50.000	14456.0	0.0129	AFMC	N Y
3135	72.000	92.000	309.00	16.000	14456.0	0.0132	AFMC	N Y
3136	72.000	92.000	449.00	0.0000	14456.0	0.0164	AFMC	N Y
3137	72.000	92.000	201.00	12.000	14456.0	0.0123	AFMC	N Y
3138	72.000	92.000	108.00	39.000	14456.0	0.0112	AFMC	N Y
3139	72.000	92.000	37.000	123.00	14456.0	0.0094	AFMC	N Y
3140	72.000	92.000	4.0000	252.00	14456.0	0.0099	AFMC	N Y
3141	72.000	92.000	0.0000	501.00	14456.0	0.0100	AFMC	N Y
3142	72.000	92.000	0.0000	592.00	14456.0	0.0092	AFMC	N Y
3143	72.000	92.000	0.0000	505.00	14456.0	0.0097	AFMC	N Y
3144	72.000	92.000	0.0000	463.00	14456.0	0.0091	AFMC	N Y
3145	73.000	92.000	188.00	25.000	6341.0	0.0079	AFMC	N N
3146	73.000	92.000	645.00	0.0000	6341.0	0.0182	AFMC	N N
3147	73.000	92.000	851.00	0.0000	6341.0	0.0167	AFMC	N N
3148	73.000	92.000	994.00	0.0000	6341.0	0.0231	AFMC	N N
3149	73.000	92.000	651.00	0.0000	6341.0	0.0142	AFMC	N N
3150	73.000	92.000	473.00	0.0000	6341.0	0.0109	AFMC	N N
3151	73.000	92.000	170.00	27.000	6341.0	0.0093	AFMC	N N
3152	73.000	92.000	53.000	49.000	6341.0	0.0064	AFMC	N N
3153	73.000	92.000	5.0000	235.00	6341.0	0.0090	AFMC	N N
3154	73.000	92.000	0.0000	354.00	6341.0	0.0070	AFMC	N N
3155	73.000	92.000	0.0000	318.00	6341.0	0.0073	AFMC	N N
3156	73.000	92.000	8.0000	171.00	6341.0	0.0078	AFMC	N N
3157	74.000	92.000	274.00	21.000	3391.0	0.0182	AFMC	N N
3158	74.000	92.000	576.00	0.0000	3391.0	0.0243	AFMC	N N
3159	74.000	92.000	885.00	0.0000	3391.0	0.0323	AFMC	N N
3160	74.000	92.000	1011.0	0.0000	3391.0	0.1767	AFMC	N N
3161	74.000	92.000	900.00	0.0000	3391.0	0.0306	AFMC	N N
3162	74.000	92.000	847.00	0.0000	3391.0	0.0308	AFMC	N N
3163	74.000	92.000	478.00	10.000	3391.0	0.0299	AFMC	N N
3164	74.000	92.000	200.00	52.000	3391.0	0.0193	AFMC	N N
3165	74.000	92.000	33.000	161.00	3391.0	0.0150	AFMC	N N
3166	74.000	92.000	16.000	210.00	3391.0	0.0162	AFMC	N N
3167	74.000	92.000	14.000	199.00	3391.0	0.0157	AFMC	N N
3168	74.000	92.000	94.000	78.000	3391.0	0.0158	AFMC	N N
3169	75.000	92.000	29.000	107.00	1618.0	0.0075	AFMC	N N
3170	75.000	92.000	79.000	37.000	1618.0	0.0089	AFMC	N N
3171	75.000	92.000	190.00	2.0000	1618.0	0.0103	AFMC	N N
3172	75.000	92.000	202.00	5.0000	1618.0	0.0118	AFMC	N N
3173	75.000	92.000	130.00	14.000	1618.0	0.0106	AFMC	N N
3174	75.000	92.000	172.00	0.0000	1618.0	0.0109	AFMC	N N
3175	75.000	92.000	25.000	50.000	1618.0	0.0089	AFMC	N N
3176	75.000	92.000	0.0000	43.000	1618.0	0.0072	AFMC	N N
3177	75.000	92.000	3.0000	36.000	1618.0	0.0070	AFMC	N N
3178	75.000	92.000	0.0000	207.00	1618.0	0.0072	AFMC	N N
3179	75.000	92.000	0.0000	250.00	1618.0	0.0074	AFMC	N N
3180	75.000	92.000	0.0000	177.00	1618.0	0.0070	AFMC	N N

3181	76.000	92.000	71.000	252.00	11431.0	0.0080	AFMC	N	Y
3182	76.000	92.000	226.00	1.0000	11431.0	0.0076	AFMC	N	Y
3183	76.000	92.000	510.00	0.0000	11431.0	0.0156	AFMC	N	Y
3184	76.000	92.000	610.00	0.0000	11431.0	0.0144	AFMC	N	Y
3185	76.000	92.000	253.00	0.0000	11431.0	0.0129	AFMC	N	Y
3186	76.000	92.000	204.00	1.0000	11431.0	0.0128	AFMC	N	Y
3187	76.000	92.000	64.000	45.000	11431.0	0.0088	AFMC	N	Y
3188	76.000	92.000	0.0000	305.00	11431.0	0.0079	AFMC	N	Y
3189	76.000	92.000	0.0000	297.00	11431.0	0.0073	AFMC	N	Y
3190	76.000	92.000	0.0000	457.00	11431.0	0.0081	AFMC	N	Y
3191	76.000	92.000	0.0000	496.00	11431.0	0.0073	AFMC	N	Y
3192	76.000	92.000	0.0000	317.00	11431.0	0.0078	AFMC	N	Y
3193	77.000	92.000	296.00	23.000	868.00	0.0265	AFMC	N	N
3194	77.000	92.000	714.00	0.0000	868.00	0.0250	AFMC	N	N
3195	77.000	92.000	878.00	0.0000	868.00	0.0271	AFMC	N	N
3196	77.000	92.000	1011.0	0.0000	868.00	0.0257	AFMC	N	N
3197	77.000	92.000	814.00	0.0000	868.00	0.0220	AFMC	N	N
3198	77.000	92.000	747.00	0.0000	868.00	0.0252	AFMC	N	N
3199	77.000	92.000	402.00	13.000	868.00	0.0234	AFMC	N	N
3200	77.000	92.000	190.00	37.000	868.00	0.0216	AFMC	N	N
3201	77.000	92.000	35.000	115.00	868.00	0.0239	AFMC	N	N
3202	77.000	92.000	0.0000	272.00	868.00	0.0240	AFMC	N	N
3203	77.000	92.000	8.0000	152.00	868.00	0.0242	AFMC	N	N
3204	77.000	92.000	101.00	99.000	868.00	0.0232	AFMC	N	N
3205	78.000	92.000	0.0000	101.00	11373.0	0.0100	AFMC	N	Y
3206	78.000	92.000	355.00	24.000	11373.0	0.0150	AFMC	N	Y
3207	78.000	92.000	0.0000	23.000	11373.0	0.0181	AFMC	N	Y
3208	78.000	92.000	519.00	0.0000	11373.0	0.0197	AFMC	N	Y
3209	78.000	92.000	328.00	0.0000	11373.0	0.0164	AFMC	N	Y
3210	78.000	92.000	227.00	28.000	11373.0	0.0148	AFMC	N	Y
3211	78.000	92.000	140.00	68.000	11373.0	0.0118	AFMC	N	Y
3212	78.000	92.000	32.000	179.00	11373.0	0.0097	AFMC	N	Y
3213	78.000	92.000	0.0000	381.00	11373.0	0.0103	AFMC	N	Y
3214	78.000	92.000	0.0000	436.00	11373.0	0.0121	AFMC	N	Y
3215	78.000	92.000	0.0000	453.00	11373.0	0.0105	AFMC	N	Y
3216	78.000	92.000	5.0000	328.00	11373.0	0.0103	AFMC	N	Y
3217	79.000	92.000	120.00	131.00	13678.0	0.0163	AFMC	N	Y
3218	79.000	92.000	516.00	4.0000	13678.0	0.0242	AFMC	N	Y
3219	79.000	92.000	549.00	0.0000	13678.0	0.0243	AFMC	N	Y
3220	79.000	92.000	679.00	0.0000	13678.0	0.0258	AFMC	N	Y
3221	79.000	92.000	373.00	0.0000	13678.0	0.0230	AFMC	N	Y
3222	79.000	92.000	260.00	14.000	13678.0	0.0201	AFMC	N	Y
3223	79.000	92.000	116.00	87.000	13678.0	0.0175	AFMC	N	Y
3224	79.000	92.000	63.000	127.00	13678.0	0.0167	AFMC	N	Y
3225	79.000	92.000	3.0000	244.00	13678.0	0.0177	AFMC	N	Y
3226	79.000	92.000	0.0000	446.00	13678.0	0.0192	AFMC	N	Y
3227	79.000	92.000	3.0000	271.00	13678.0	0.0180	AFMC	N	Y
3228	79.000	92.000	15.000	203.00	13678.0	0.0162	AFMC	N	Y
3229	80.000	92.000	285.00	36.000	14689.0	0.0173	AFMC	N	N
3230	80.000	92.000	740.00	0.0000	14689.0	0.0244	AFMC	N	N
3231	80.000	92.000	906.00	0.0000	14689.0	0.0292	AFMC	N	N
3232	80.000	92.000	1060.0	0.0000	14689.0	0.0316	AFMC	N	N
3233	80.000	92.000	814.00	0.0000	14689.0	0.0260	AFMC	N	N
3234	80.000	92.000	735.00	0.0000	14689.0	0.0270	AFMC	N	N
3235	80.000	92.000	432.00	12.000	14689.0	0.0231	AFMC	N	N
3236	80.000	92.000	237.00	29.000	14689.0	0.0166	AFMC	N	N
3237	80.000	92.000	65.000	63.000	14689.0	0.0126	AFMC	N	N
3238	80.000	92.000	4.0000	257.00	14689.0	0.0138	AFMC	N	N
3239	80.000	92.000	17.000	257.00	14689.0	0.0130	AFMC	N	N
3240	80.000	92.000	136.00	67.000	14689.0	0.0124	AFMC	N	N
3241	67.000	91.000	254.00	33.000	2658.0	0.0865	AFMC	N	N
3242	67.000	91.000	381.00	4.0000	2658.0	0.0788	AFMC	N	N
3243	67.000	91.000	608.00	4.0000	2658.0	0.0717	AFMC	N	N
3244	67.000	91.000	769.00	0.0000	2658.0	0.0782	AFMC	N	N
3245	67.000	91.000	701.00	0.0000	2658.0	0.0557	AFMC	N	N
3246	67.000	91.000	432.00	16.000	2658.0	0.0670	AFMC	N	N
3247	67.000	91.000	100.00	14.000	2658.0	0.0745	AFMC	N	N
3248	67.000	91.000	6.0000	293.00	2658.0	0.0592	AFMC	N	N
3249	67.000	91.000	0.0000	0.0000	2658.0	0.0528	AFMC	N	N
3250	67.000	91.000	0.0000	426.00	2658.0	0.0451	AFMC	N	N
3251	67.000	91.000	7.0000	372.00	2658.0	0.0538	AFMC	N	N

3252	67.000	91.000	51.000	236.00	2658.0	0.0448	AFMC	N	N
3253	68.000	91.000	50.000	192.00	1730.0	0.0127	AFMC	N	N
3254	68.000	91.000	142.00	91.000	1730.0	0.0152	AFMC	N	N
3255	68.000	91.000	422.00	23.000	1730.0	0.0178	AFMC	N	N
3256	68.000	91.000	494.00	0.0000	1730.0	0.0198	AFMC	N	N
3257	68.000	91.000	240.00	10.000	1730.0	0.0156	AFMC	N	N
3258	68.000	91.000	96.000	70.000	1730.0	0.0151	AFMC	N	N
3259	68.000	91.000	7.0000	234.00	1730.0	0.0163	AFMC	N	N
3260	68.000	91.000	0.0000	402.00	1730.0	0.0152	AFMC	N	N
3261	68.000	91.000	0.0000	541.00	1730.0	0.0143	AFMC	N	N
3262	68.000	91.000	0.0000	612.00	1730.0	0.0147	AFMC	N	N
3263	68.000	91.000	0.0000	654.00	1730.0	0.0143	AFMC	N	N
3264	68.000	91.000	5.0000	396.00	1730.0	0.0130	AFMC	N	N
3265	69.000	91.000	74.000	69.000	6352.0	0.0096	AFMC	Y	N
3266	69.000	91.000	385.00	2.0000	6352.0	0.0108	AFMC	Y	N
3267	69.000	91.000	867.00	0.0000	6352.0	0.0197	AFMC	Y	N
3268	69.000	91.000	686.00	0.0000	6352.0	0.0203	AFMC	Y	N
3269	69.000	91.000	379.00	0.0000	6352.0	0.0176	AFMC	Y	N
3270	69.000	91.000	507.00	0.0000	6352.0	0.0152	AFMC	Y	N
3271	69.000	91.000	260.00	3.0000	6352.0	0.0157	AFMC	Y	N
3272	69.000	91.000	134.00	64.000	6352.0	0.0121	AFMC	Y	N
3273	69.000	91.000	0.0000	279.00	6352.0	0.0100	AFMC	Y	N
3274	69.000	91.000	0.0000	0.0000	6352.0	0.0099	AFMC	Y	N
3275	69.000	91.000	0.0000	480.00	6352.0	0.0086	AFMC	Y	N
3276	69.000	91.000	0.0000	338.00	6352.0	0.0104	AFMC	Y	N
3277	70.000	91.000	39.000	223.00	7686.0	0.0120	AFMC	Y	N
3278	70.000	91.000	110.00	31.000	7686.0	0.0121	AFMC	Y	N
3279	70.000	91.000	244.00	39.000	7686.0	0.0150	AFMC	Y	N
3280	70.000	91.000	396.00	0.0000	7686.0	0.0154	AFMC	Y	N
3281	70.000	91.000	213.00	10.000	7686.0	0.0138	AFMC	Y	N
3282	70.000	91.000	119.00	46.000	7686.0	0.0142	AFMC	Y	N
3283	70.000	91.000	8.0000	197.00	7686.0	0.0114	AFMC	Y	N
3284	70.000	91.000	0.0000	394.00	7686.0	0.0128	AFMC	Y	N
3285	70.000	91.000	0.0000	0.0000	7686.0	0.0134	AFMC	Y	N
3286	70.000	91.000	0.0000	0.0000	7686.0	0.0123	AFMC	Y	N
3287	70.000	91.000	0.0000	0.0000	7686.0	0.0133	AFMC	Y	N
3288	70.000	91.000	0.0000	408.00	7686.0	0.0139	AFMC	Y	N
3289	71.000	91.000	332.00	9.0000	13222.0	0.0137	AFMC	Y	Y
3290	71.000	91.000	714.00	0.0000	13222.0	0.0217	AFMC	Y	Y
3291	71.000	91.000	1376.0	0.0000	13222.0	0.0291	AFMC	Y	Y
3292	71.000	91.000	1255.0	0.0000	13222.0	0.0301	AFMC	Y	Y
3293	71.000	91.000	806.00	0.0000	13222.0	0.0222	AFMC	Y	Y
3294	71.000	91.000	762.00	0.0000	13222.0	0.0230	AFMC	Y	Y
3295	71.000	91.000	592.00	0.0000	13222.0	0.0195	AFMC	Y	Y
3296	71.000	91.000	350.00	0.0000	13222.0	0.0154	AFMC	Y	Y
3297	71.000	91.000	41.000	106.00	13222.0	0.0081	AFMC	Y	Y
3298	71.000	91.000	0.0000	385.00	13222.0	0.0081	AFMC	Y	Y
3299	71.000	91.000	0.0000	353.00	13222.0	0.0082	AFMC	Y	Y
3300	71.000	91.000	49.000	127.00	13222.0	0.0083	AFMC	Y	Y
3301	72.000	91.000	34.000	226.00	14456.0	0.0105	AFMC	N	Y
3302	72.000	91.000	164.00	83.000	14456.0	0.0117	AFMC	N	Y
3303	72.000	91.000	442.00	23.000	14456.0	0.0138	AFMC	N	Y
3304	72.000	91.000	510.00	0.0000	14456.0	0.0165	AFMC	N	Y
3305	72.000	91.000	256.00	8.0000	14456.0	0.0131	AFMC	N	Y
3306	72.000	91.000	106.00	88.000	14456.0	0.0111	AFMC	N	Y
3307	72.000	91.000	9.0000	210.00	14456.0	0.0100	AFMC	N	Y
3308	72.000	91.000	0.0000	376.00	14456.0	0.0094	AFMC	N	Y
3309	72.000	91.000	0.0000	523.00	14456.0	0.0099	AFMC	N	Y
3310	72.000	91.000	0.0000	579.00	14456.0	0.0097	AFMC	N	Y
3311	72.000	91.000	0.0000	631.00	14456.0	0.0099	AFMC	N	Y
3312	72.000	91.000	6.0000	372.00	14456.0	0.0094	AFMC	N	Y
3313	73.000	91.000	202.00	2.0000	6341.0	0.0073	AFMC	N	N
3314	73.000	91.000	811.00	0.0000	6341.0	0.0150	AFMC	N	N
3315	73.000	91.000	1013.0	0.0000	6341.0	0.0190	AFMC	N	N
3316	73.000	91.000	903.00	0.0000	6341.0	0.0218	AFMC	N	N
3317	73.000	91.000	563.00	0.0000	6341.0	0.0173	AFMC	N	N
3318	73.000	91.000	581.00	0.0000	6341.0	0.0140	AFMC	N	N
3319	73.000	91.000	263.00	0.0000	6341.0	0.0121	AFMC	N	N
3320	73.000	91.000	60.000	87.000	6341.0	0.0077	AFMC	N	N
3321	73.000	91.000	12.000	269.00	6341.0	0.0066	AFMC	N	N
3322	73.000	91.000	0.0000	375.00	6341.0	0.0069	AFMC	N	N

3323	73.000	91.000	0.0000	331.00	6341.0	0.0070	AFMC	N	N
3324	73.000	91.000	21.000	120.00	6341.0	0.0082	AFMC	N	N
3325	74.000	91.000	255.00	30.000	3391.0	0.0178	AFMC	N	N
3326	74.000	91.000	540.00	7.0000	3391.0	0.0236	AFMC	N	N
3327	74.000	91.000	806.00	0.0000	3391.0	0.0264	AFMC	N	N
3328	74.000	91.000	1105.0	0.0000	3391.0	0.0338	AFMC	N	N
3329	74.000	91.000	805.00	0.0000	3391.0	0.0262	AFMC	N	N
3330	74.000	91.000	703.00	0.0000	3391.0	0.0256	AFMC	N	N
3331	74.000	91.000	374.00	12.000	3391.0	0.0215	AFMC	N	N
3332	74.000	91.000	96.000	89.000	3391.0	0.0167	AFMC	N	N
3333	74.000	91.000	35.000	168.00	3391.0	0.0152	AFMC	N	N
3334	74.000	91.000	0.0000	283.00	3391.0	0.0155	AFMC	N	N
3335	74.000	91.000	0.0000	272.00	3391.0	0.0142	AFMC	N	N
3336	74.000	91.000	124.00	75.000	3391.0	0.0146	AFMC	N	N
3337	75.000	91.000	1.0000	147.00	1619.0	0.0082	AFMC	N	N
3338	75.000	91.000	62.000	43.000	1619.0	0.0071	AFMC	N	N
3339	75.000	91.000	261.00	13.000	1619.0	0.0092	AFMC	N	N
3340	75.000	91.000	236.00	1.0000	1619.0	0.0124	AFMC	N	N
3341	75.000	91.000	145.00	4.0000	1619.0	0.0099	AFMC	N	N
3342	75.000	91.000	303.00	0.0000	1619.0	0.0109	AFMC	N	N
3343	75.000	91.000	130.00	17.000	1619.0	0.0116	AFMC	N	N
3344	75.000	91.000	145.00	9.0000	1619.0	0.0083	AFMC	N	N
3345	75.000	91.000	41.000	13.000	1619.0	0.0065	AFMC	N	N
3346	75.000	91.000	0.0000	70.000	1619.0	0.0069	AFMC	N	N
3347	75.000	91.000	0.0000	129.00	1619.0	0.0071	AFMC	N	N
3348	75.000	91.000	0.0000	92.000	1619.0	0.0074	AFMC	N	N
3349	76.000	91.000	37.000	87.000	11422.0	0.0077	AFMC	N	Y
3350	76.000	91.000	348.00	0.0000	11422.0	0.0119	AFMC	N	Y
3351	76.000	91.000	707.00	0.0000	11422.0	0.0158	AFMC	N	Y
3352	76.000	91.000	532.00	0.0000	11422.0	0.0139	AFMC	N	Y
3353	76.000	91.000	259.00	0.0000	11422.0	0.0123	AFMC	N	Y
3354	76.000	91.000	400.00	0.0000	11422.0	0.0130	AFMC	N	Y
3355	76.000	91.000	189.00	3.0000	11422.0	0.0096	AFMC	N	Y
3356	76.000	91.000	104.00	40.000	11422.0	0.0083	AFMC	N	Y
3357	76.000	91.000	7.0000	161.00	11422.0	0.0082	AFMC	N	Y
3358	76.000	91.000	0.0000	372.00	11422.0	0.0086	AFMC	N	Y
3359	76.000	91.000	4.0000	232.00	11422.0	0.0080	AFMC	N	Y
3360	76.000	91.000	0.0000	392.00	11422.0	0.0079	AFMC	N	Y
3361	77.000	91.000	310.00	9.0000	864.00	0.0270	AFMC	N	N
3362	77.000	91.000	558.00	3.0000	864.00	0.0241	AFMC	N	N
3363	77.000	91.000	850.00	0.0000	864.00	0.0279	AFMC	N	N
3364	77.000	91.000	1089.0	0.0000	864.00	0.0315	AFMC	N	N
3365	77.000	91.000	817.00	0.0000	864.00	0.0268	AFMC	N	N
3366	77.000	91.000	649.00	0.0000	864.00	0.0279	AFMC	N	N
3367	77.000	91.000	292.00	21.000	864.00	0.0271	AFMC	N	N
3368	77.000	91.000	42.000	232.00	864.00	0.0256	AFMC	N	N
3369	77.000	91.000	0.0000	307.00	864.00	0.0232	AFMC	N	N
3370	77.000	91.000	0.0000	402.00	864.00	0.0190	AFMC	N	N
3371	77.000	91.000	0.0000	317.00	864.00	0.0256	AFMC	N	N
3372	77.000	91.000	105.00	147.00	864.00	0.0241	AFMC	N	N
3373	78.000	91.000	90.000	147.00	11778.0	0.0099	AFMC	N	Y
3374	78.000	91.000	235.00	8.0000	11778.0	0.0114	AFMC	N	Y
3375	78.000	91.000	375.00	9.0000	11778.0	0.0156	AFMC	N	Y
3376	78.000	91.000	501.00	0.0000	11778.0	0.0168	AFMC	N	Y
3377	78.000	91.000	314.00	6.0000	11778.0	0.0141	AFMC	N	Y
3378	78.000	91.000	0.0000	46.000	11778.0	0.0119	AFMC	N	Y
3379	78.000	91.000	29.000	139.00	11778.0	0.0096	AFMC	N	Y
3380	78.000	91.000	0.0000	342.00	11778.0	0.0101	AFMC	N	Y
3381	78.000	91.000	0.0000	405.00	11778.0	0.0106	AFMC	N	Y
3382	78.000	91.000	0.0000	552.00	11778.0	0.0101	AFMC	N	Y
3383	78.000	91.000	0.0000	489.00	11778.0	0.0114	AFMC	N	Y
3384	78.000	91.000	0.0000	331.00	11778.0	0.0103	AFMC	N	Y
3385	79.000	91.000	139.00	65.000	13272.0	0.0117	AFMC	N	Y
3386	79.000	91.000	834.00	0.0000	13272.0	0.0218	AFMC	N	Y
3387	79.000	91.000	834.00	0.0000	13272.0	0.0262	AFMC	N	Y
3388	79.000	91.000	844.00	0.0000	13272.0	0.0288	AFMC	N	Y
3389	79.000	91.000	396.00	0.0000	13272.0	0.0227	AFMC	N	Y
3390	79.000	91.000	285.00	34.000	13272.0	0.0229	AFMC	N	Y
3391	79.000	91.000	71.000	81.000	13272.0	0.0164	AFMC	N	Y
3392	79.000	91.000	18.000	306.00	13272.0	0.0167	AFMC	N	Y
3393	79.000	91.000	0.0000	476.00	13272.0	0.0169	AFMC	N	Y

3394	79.000	91.000	0.0000	650.00	13272.0	0.0177	AFMC	N	Y
3395	79.000	91.000	0.0000	593.00	13272.0	0.0179	AFMC	N	Y
3396	79.000	91.000	22.000	280.00	13272.0	0.0167	AFMC	N	Y
3397	80.000	91.000	346.00	9.0000	14689.0	0.0166	AFMC	N	N
3398	80.000	91.000	540.00	4.0000	14689.0	0.0223	AFMC	N	N
3399	80.000	91.000	892.00	0.0000	14689.0	0.0275	AFMC	N	N
3400	80.000	91.000	1117.0	0.0000	14689.0	0.0303	AFMC	N	N
3401	80.000	91.000	826.00	0.0000	14689.0	0.0263	AFMC	N	N
3402	80.000	91.000	673.00	0.0000	14689.0	0.0235	AFMC	N	N
3403	80.000	91.000	317.00	9.0000	14689.0	0.0205	AFMC	N	N
3404	80.000	91.000	62.000	188.00	14689.0	0.0157	AFMC	N	N
3405	80.000	91.000	3.0000	271.00	14689.0	0.0157	AFMC	N	N
3406	80.000	91.000	0.0000	357.00	14689.0	0.0148	AFMC	N	N
3407	80.000	91.000	2.0000	264.00	14689.0	0.0132	AFMC	N	N
3408	80.000	91.000	107.00	145.00	14689.0	0.0132	AFMC	N	N
3409	56.000	94.000	9.0000	336.00	3583.0	0.0130	SPC	N	N
3410	56.000	94.000	42.000	179.00	3583.0	0.0176	SPC	N	N
3411	56.000	94.000	16.000	210.00	3583.0	0.0235	SPC	N	N
3412	56.000	94.000	158.00	49.000	3583.0	0.0198	SPC	N	N
3413	56.000	94.000	66.000	93.000	3583.0	0.0202	SPC	N	N
3414	56.000	94.000	48.000	135.00	3583.0	0.0174	SPC	N	N
3415	56.000	94.000	0.0000	0.0000	3583.0	0.0176	SPC	N	N
3416	56.000	94.000	0.0000	0.0000	3583.0	0.0169	SPC	N	N
3417	56.000	94.000	0.0000	0.0000	3583.0	0.0180	SPC	N	N
3418	56.000	94.000	0.0000	0.0000	3583.0	0.0216	SPC	N	N
3419	56.000	94.000	0.0000	0.0000	3583.0	0.0197	SPC	N	N
3420	56.000	94.000	0.0000	0.0000	3583.0	0.0189	SPC	N	N
3421	57.000	94.000	0.0000	0.0000	322.00	0.0819	SPC	N	N
3422	57.000	94.000	0.0000	0.0000	322.00	0.0758	SPC	N	N
3423	57.000	94.000	0.0000	0.0000	322.00	0.0818	SPC	N	N
3424	57.000	94.000	0.0000	0.0000	322.00	0.0758	SPC	N	N
3425	57.000	94.000	0.0000	0.0000	322.00	0.0707	SPC	N	N
3426	57.000	94.000	0.0000	0.0000	322.00	0.0741	SPC	N	N
3427	57.000	94.000	0.0000	0.0000	322.00	0.0768	SPC	N	N
3428	57.000	94.000	0.0000	0.0000	322.00	0.0805	SPC	N	N
3429	57.000	94.000	0.0000	0.0000	322.00	0.0768	SPC	N	N
3430	57.000	94.000	0.0000	0.0000	322.00	0.0788	SPC	N	N
3431	57.000	94.000	0.0000	0.0000	322.00	0.0644	SPC	N	N
3432	57.000	94.000	0.0000	0.0000	322.00	0.0601	SPC	N	N
3433	58.000	94.000	457.00	0.0000	115.00	0.0578	SPC	N	N
3434	58.000	94.000	401.00	14.000	115.00	0.0425	SPC	N	N
3435	58.000	94.000	159.00	138.00	115.00	0.0357	SPC	N	N
3436	58.000	94.000	554.00	0.0000	115.00	0.0511	SPC	N	N
3437	58.000	94.000	392.00	5.0000	115.00	0.0395	SPC	N	N
3438	58.000	94.000	207.00	72.000	115.00	0.0403	SPC	N	N
3439	58.000	94.000	78.000	131.00	115.00	0.0442	SPC	N	N
3440	58.000	94.000	17.000	281.00	115.00	0.0448	SPC	N	N
3441	58.000	94.000	0.0000	581.00	115.00	0.0434	SPC	N	N
3442	58.000	94.000	0.0000	651.00	115.00	0.0421	SPC	N	N
3443	58.000	94.000	0.0000	599.00	115.00	0.0484	SPC	N	N
3444	58.000	94.000	4.0000	294.00	115.00	0.0414	SPC	N	N
3445	59.000	94.000	642.00	0.0000	2897.0	0.0141	SPC	N	N
3446	59.000	94.000	0.0000	0.0000	2897.0	0.0212	SPC	N	N
3447	59.000	94.000	1059.0	0.0000	2897.0	0.0262	SPC	N	N
3448	59.000	94.000	1097.0	0.0000	2897.0	0.0234	SPC	N	N
3449	59.000	94.000	0.0000	0.0000	2897.0	0.0214	SPC	N	N
3450	59.000	94.000	0.0000	0.0000	2897.0	0.0184	SPC	N	N
3451	59.000	94.000	809.00	0.0000	2897.0	0.0205	SPC	N	N
3452	59.000	94.000	644.00	0.0000	2897.0	0.0114	SPC	N	N
3453	59.000	94.000	249.00	3.0000	2897.0	0.0090	SPC	N	N
3454	59.000	94.000	43.000	91.000	2897.0	0.0079	SPC	N	N
3455	59.000	94.000	0.0000	0.0000	2897.0	0.0069	SPC	N	N
3456	59.000	94.000	16.000	156.00	2897.0	0.0092	SPC	N	N
3457	60.000	94.000	0.0000	0.0000	1464.0	0.0207	SPC	N	N
3458	60.000	94.000	0.0000	0.0000	1464.0	0.0229	SPC	N	N
3459	60.000	94.000	0.0000	0.0000	1464.0	0.0241	SPC	N	N
3460	60.000	94.000	0.0000	0.0000	1464.0	0.0240	SPC	N	N
3461	60.000	94.000	0.0000	0.0000	1464.0	0.0212	SPC	N	N
3462	60.000	94.000	0.0000	0.0000	1464.0	0.0215	SPC	N	N
3463	60.000	94.000	0.0000	0.0000	1464.0	0.0202	SPC	N	N
3464	60.000	94.000	0.0000	0.0000	1464.0	0.0191	SPC	N	N

3465	60.000	94.000	0.0000	0.0000	1464.0	0.0180	SPC	N	N
3466	60.000	94.000	0.0000	0.0000	1464.0	0.0173	SPC	N	N
3467	60.000	94.000	0.0000	0.0000	1464.0	0.0174	SPC	N	N
3468	60.000	94.000	0.0000	0.0000	1464.0	0.0167	SPC	N	N
3469	61.000	94.000	483.00	0.0000	2938.0	0.0165	SPC	Y	N
3470	61.000	94.000	1002.0	0.0000	2938.0	0.0271	SPC	Y	N
3471	61.000	94.000	887.00	0.0000	2938.0	0.0202	SPC	Y	N
3472	61.000	94.000	1099.0	0.0000	2938.0	0.0301	SPC	Y	N
3473	61.000	94.000	1264.0	0.0000	2938.0	0.0307	SPC	Y	N
3474	61.000	94.000	694.00	0.0000	2938.0	0.0183	SPC	Y	N
3475	61.000	94.000	538.00	2.0000	2938.0	0.0163	SPC	Y	N
3476	61.000	94.000	226.00	8.0000	2938.0	0.0156	SPC	Y	N
3477	61.000	94.000	111.00	75.000	2938.0	0.0065	SPC	Y	N
3478	61.000	94.000	23.000	226.00	2938.0	0.0070	SPC	Y	N
3479	61.000	94.000	21.000	222.00	2938.0	0.0078	SPC	Y	N
3480	61.000	94.000	81.000	59.000	2938.0	0.0083	SPC	Y	N
3481	62.000	94.000	0.0000	0.0000	119.00	0.0596	SPC	N	N
3482	62.000	94.000	0.0000	0.0000	119.00	0.0597	SPC	N	N
3483	62.000	94.000	0.0000	0.0000	119.00	0.0563	SPC	N	N
3484	62.000	94.000	0.0000	0.0000	119.00	0.1957	SPC	N	N
3485	62.000	94.000	0.0000	0.0000	119.00	0.1349	SPC	N	N
3486	62.000	94.000	0.0000	0.0000	119.00	0.1408	SPC	N	N
3487	62.000	94.000	0.0000	0.0000	119.00	0.0302	SPC	N	N
3488	62.000	94.000	0.0000	0.0000	119.00	0.0193	SPC	N	N
3489	62.000	94.000	0.0000	0.0000	119.00	0.0222	SPC	N	N
3490	62.000	94.000	0.0000	0.0000	119.00	0.0233	SPC	N	N
3491	62.000	94.000	0.0000	0.0000	119.00	0.0207	SPC	N	N
3492	62.000	94.000	0.0000	0.0000	119.00	0.0290	SPC	N	N
3493	63.000	94.000	0.0000	0.0000	497.00	0.1283	SPC	N	N
3494	63.000	94.000	0.0000	0.0000	497.00	0.1265	SPC	N	N
3495	63.000	94.000	0.0000	0.0000	497.00	0.1259	SPC	N	N
3496	63.000	94.000	0.0000	0.0000	497.00	0.1380	SPC	N	N
3497	63.000	94.000	0.0000	0.0000	497.00	0.1421	SPC	N	N
3498	63.000	94.000	0.0000	0.0000	497.00	0.1428	SPC	N	N
3499	63.000	94.000	0.0000	0.0000	497.00	0.1263	SPC	N	N
3500	63.000	94.000	0.0000	0.0000	497.00	0.1264	SPC	N	N
3501	63.000	94.000	0.0000	0.0000	497.00	0.1359	SPC	N	N
3502	63.000	94.000	0.0000	0.0000	497.00	0.1315	SPC	N	N
3503	63.000	94.000	0.0000	0.0000	497.00	0.1395	SPC	N	N
3504	63.000	94.000	0.0000	0.0000	497.00	0.1320	SPC	N	N
3505	64.000	94.000	1.0000	455.00	3433.0	0.0079	SPC	N	N
3506	64.000	94.000	26.000	227.00	3433.0	0.0059	SPC	N	N
3507	64.000	94.000	109.00	36.000	3433.0	0.0078	SPC	N	N
3508	64.000	94.000	17.000	11.000	3433.0	0.0071	SPC	N	N
3509	64.000	94.000	5.0000	22.000	3433.0	0.0063	SPC	N	N
3510	64.000	94.000	31.000	144.00	3433.0	0.0073	SPC	N	N
3511	64.000	94.000	0.0000	0.0000	3433.0	0.0070	SPC	N	N
3512	64.000	94.000	0.0000	0.0000	3433.0	0.0066	SPC	N	N
3513	64.000	94.000	0.0000	0.0000	3433.0	0.0078	SPC	N	N
3514	64.000	94.000	0.0000	0.0000	3433.0	0.0083	SPC	N	N
3515	64.000	94.000	0.0000	0.0000	3433.0	0.0071	SPC	N	N
3516	64.000	94.000	0.0000	0.0000	3433.0	0.0078	SPC	N	N
3517	65.000	94.000	519.00	1.0000	2483.0	0.0132	SPC	N	N
3518	65.000	94.000	972.00	0.0000	2483.0	0.0178	SPC	N	N
3519	65.000	94.000	1008.0	0.0000	2483.0	0.0163	SPC	N	N
3520	65.000	94.000	1032.0	0.0000	2483.0	0.1890	SPC	N	N
3521	65.000	94.000	926.00	0.0000	2483.0	0.1600	SPC	N	N
3522	65.000	94.000	749.00	0.0000	2483.0	0.0143	SPC	N	N
3523	65.000	94.000	576.00	0.0000	2483.0	0.0129	SPC	N	N
3524	65.000	94.000	223.00	5.0000	2483.0	0.0105	SPC	N	N
3525	65.000	94.000	14.000	143.00	2483.0	0.0070	SPC	N	N
3526	65.000	94.000	10.000	165.00	2483.0	0.0070	SPC	N	N
3527	65.000	94.000	14.000	182.00	2483.0	0.0089	SPC	N	N
3528	65.000	94.000	0.0000	0.0000	2483.0	0.0054	SPC	N	N
3529	66.000	94.000	0.0000	0.0000	6916.0	0.0106	SPC	N	N
3530	66.000	94.000	0.0000	0.0000	6916.0	0.0114	SPC	N	N
3531	66.000	94.000	175.00	6.0000	6916.0	0.0141	SPC	N	N
3532	66.000	94.000	0.0000	0.0000	6916.0	0.0168	SPC	N	N
3533	66.000	94.000	0.0000	0.0000	6916.0	0.0137	SPC	N	N
3534	66.000	94.000	0.0000	0.0000	6916.0	0.0137	SPC	N	N
3535	66.000	94.000	0.0000	0.0000	6916.0	0.0105	SPC	N	N

3536	66.000	94.000	240.00	0.0000	6916.0	0.0140	SPC	N	N
3537	66.000	94.000	291.00	0.0000	6916.0	0.0128	SPC	N	N
3538	66.000	94.000	229.00	0.0000	6916.0	0.0103	SPC	N	N
3539	66.000	94.000	162.00	2.0000	6916.0	0.0116	SPC	N	N
3540	66.000	94.000	0.0000	0.0000	6916.0	0.1150	SPC	N	N
3541	56.000	93.000	0.0000	271.00	3583.0	0.0178	SPC	N	N
3542	56.000	93.000	44.000	211.00	3583.0	0.0186	SPC	N	N
3543	56.000	93.000	99.000	49.000	3583.0	0.0163	SPC	N	N
3544	56.000	93.000	73.000	106.00	3583.0	0.0163	SPC	N	N
3545	56.000	93.000	178.00	11.000	3583.0	0.0155	SPC	N	N
3546	56.000	93.000	85.000	74.000	3583.0	0.0156	SPC	N	N
3547	56.000	93.000	25.000	85.000	3583.0	0.0176	SPC	N	N
3548	56.000	93.000	0.0000	281.00	3583.0	0.0180	SPC	N	N
3549	56.000	93.000	0.0000	452.00	3583.0	0.0178	SPC	N	N
3550	56.000	93.000	0.0000	560.00	3583.0	0.0209	SPC	N	N
3551	56.000	93.000	0.0000	538.00	3583.0	0.0203	SPC	N	N
3552	56.000	93.000	0.0000	486.00	3583.0	0.0194	SPC	N	N
3553	57.000	93.000	0.0000	0.0000	388.00	0.0780	SPC	N	N
3554	57.000	93.000	0.0000	0.0000	388.00	0.0636	SPC	N	N
3555	57.000	93.000	0.0000	0.0000	388.00	0.0675	SPC	N	N
3556	57.000	93.000	0.0000	0.0000	388.00	0.0767	SPC	N	N
3557	57.000	93.000	0.0000	0.0000	388.00	0.0751	SPC	N	N
3558	57.000	93.000	0.0000	0.0000	388.00	0.0797	SPC	N	N
3559	57.000	93.000	0.0000	0.0000	388.00	0.0801	SPC	N	N
3560	57.000	93.000	0.0000	0.0000	388.00	0.0875	SPC	N	N
3561	57.000	93.000	0.0000	0.0000	388.00	0.0844	SPC	N	N
3562	57.000	93.000	0.0000	0.0000	388.00	0.0873	SPC	N	N
3563	57.000	93.000	0.0000	0.0000	388.00	0.0795	SPC	N	N
3564	57.000	93.000	0.0000	0.0000	388.00	0.0773	SPC	N	N
3565	58.000	93.000	27.000	134.00	115.00	0.0402	SPC	N	N
3566	58.000	93.000	370.00	16.000	115.00	0.0378	SPC	N	N
3567	58.000	93.000	473.00	3.0000	115.00	0.0444	SPC	N	N
3568	58.000	93.000	619.00	0.0000	115.00	0.0468	SPC	N	N
3569	58.000	93.000	434.00	0.0000	115.00	0.0406	SPC	N	N
3570	58.000	93.000	0.0000	0.0000	115.00	0.0472	SPC	N	N
3571	58.000	93.000	434.00	0.0000	115.00	0.0422	SPC	N	N
3572	58.000	93.000	0.0000	0.0000	115.00	0.0415	SPC	N	N
3573	58.000	93.000	0.0000	0.0000	115.00	0.0383	SPC	N	N
3574	58.000	93.000	0.0000	0.0000	115.00	0.0535	SPC	N	N
3575	58.000	93.000	0.0000	0.0000	115.00	0.0343	SPC	N	N
3576	58.000	93.000	0.0000	283.00	115.00	0.0397	SPC	N	N
3577	59.000	93.000	484.00	0.0000	3584.0	0.0131	SPC	N	N
3578	59.000	93.000	1014.0	0.0000	3584.0	0.0155	SPC	N	N
3579	59.000	93.000	1216.0	0.0000	3584.0	0.0206	SPC	N	N
3580	59.000	93.000	1198.0	0.0000	3584.0	0.0184	SPC	N	N
3581	59.000	93.000	8.0000	0.0000	3584.0	0.0156	SPC	N	N
3582	59.000	93.000	856.00	0.0000	3584.0	0.0108	SPC	N	N
3583	59.000	93.000	680.00	0.0000	3584.0	0.0120	SPC	N	N
3584	59.000	93.000	0.0000	0.0000	3584.0	0.0088	SPC	N	N
3585	59.000	93.000	0.0000	0.0000	3584.0	0.0063	SPC	N	N
3586	59.000	93.000	45.000	89.000	3584.0	0.0136	SPC	N	N
3587	59.000	93.000	0.0000	0.0000	3584.0	0.0080	SPC	N	N
3588	59.000	93.000	0.0000	0.0000	3584.0	0.0068	SPC	N	N
3589	60.000	93.000	0.0000	0.0000	1457.0	0.0180	SPC	N	N
3590	60.000	93.000	990.00	0.0000	1457.0	0.0186	SPC	N	N
3591	60.000	93.000	1101.0	0.0000	1457.0	0.0247	SPC	N	N
3592	60.000	93.000	0.0000	0.0000	1457.0	0.0216	SPC	N	N
3593	60.000	93.000	990.00	0.0000	1457.0	0.0208	SPC	N	N
3594	60.000	93.000	776.00	0.0000	1457.0	0.0255	SPC	N	N
3595	60.000	93.000	558.00	0.0000	1457.0	0.0245	SPC	N	N
3596	60.000	93.000	0.0000	0.0000	1457.0	0.0196	SPC	N	N
3597	60.000	93.000	0.0000	0.0000	1457.0	0.0172	SPC	N	N
3598	60.000	93.000	0.0000	0.0000	1457.0	0.0171	SPC	N	N
3599	60.000	93.000	0.0000	0.0000	1457.0	0.0173	SPC	N	N
3600	60.000	93.000	0.0000	0.0000	1457.0	0.0178	SPC	N	N
3601	61.000	93.000	463.00	16.000	2977.0	0.0163	SPC	Y	N
3602	61.000	93.000	800.00	0.0000	2977.0	0.0221	SPC	Y	N
3603	61.000	93.000	1367.0	0.0000	2977.0	0.0284	SPC	Y	N
3604	61.000	93.000	1494.0	0.0000	2977.0	0.0291	SPC	Y	N
3605	61.000	93.000	1205.0	0.0000	2977.0	0.0265	SPC	Y	N
3606	61.000	93.000	770.00	0.0000	2977.0	0.0225	SPC	Y	N

3607	61.000	93.000	540.00	0.0000	2977.0	0.0218	SPC	Y	N
3608	61.000	93.000	199.00	13.000	2977.0	0.0156	SPC	Y	N
3609	61.000	93.000	189.00	33.000	2977.0	0.0087	SPC	Y	N
3610	61.000	93.000	141.00	24.000	2977.0	0.0082	SPC	Y	N
3611	61.000	93.000	57.000	91.000	2977.0	0.0104	SPC	Y	N
3612	61.000	93.000	11.000	286.00	2977.0	0.0102	SPC	Y	N
3613	62.000	93.000	0.0000	0.0000	119.00	0.0263	SPC	N	N
3614	62.000	93.000	0.0000	0.0000	119.00	0.0334	SPC	N	N
3615	62.000	93.000	0.0000	0.0000	119.00	0.0377	SPC	N	N
3616	62.000	93.000	0.0000	0.0000	119.00	0.0359	SPC	N	N
3617	62.000	93.000	0.0000	0.0000	119.00	0.0371	SPC	N	N
3618	62.000	93.000	0.0000	0.0000	119.00	0.0311	SPC	N	N
3619	62.000	93.000	0.0000	0.0000	119.00	0.0300	SPC	N	N
3620	62.000	93.000	0.0000	0.0000	119.00	0.0214	SPC	N	N
3621	62.000	93.000	0.0000	0.0000	119.00	0.0212	SPC	N	N
3622	62.000	93.000	0.0000	0.0000	119.00	0.0224	SPC	N	N
3623	62.000	93.000	0.0000	0.0000	119.00	0.0199	SPC	N	N
3624	62.000	93.000	0.0000	0.0000	119.00	0.0233	SPC	N	N
3625	63.000	93.000	0.0000	0.0000	497.00	0.1214	SPC	N	N
3626	63.000	93.000	0.0000	0.0000	497.00	0.1303	SPC	N	N
3627	63.000	93.000	0.0000	0.0000	497.00	0.1250	SPC	N	N
3628	63.000	93.000	0.0000	0.0000	497.00	0.1254	SPC	N	N
3629	63.000	93.000	0.0000	0.0000	497.00	0.1290	SPC	N	N
3630	63.000	93.000	0.0000	0.0000	497.00	0.1210	SPC	N	N
3631	63.000	93.000	0.0000	0.0000	497.00	0.1324	SPC	N	N
3632	63.000	93.000	0.0000	0.0000	497.00	0.1346	SPC	N	N
3633	63.000	93.000	0.0000	0.0000	497.00	0.1285	SPC	N	N
3634	63.000	93.000	0.0000	0.0000	497.00	0.1284	SPC	N	N
3635	63.000	93.000	0.0000	0.0000	497.00	0.1389	SPC	N	N
3636	63.000	93.000	0.0000	0.0000	497.00	0.1300	SPC	N	N
3637	64.000	93.000	0.0000	31.000	3433.0	0.0056	SPC	N	N
3638	64.000	93.000	30.000	249.00	3433.0	0.0068	SPC	N	N
3639	64.000	93.000	38.000	95.000	3433.0	0.0046	SPC	N	N
3640	64.000	93.000	28.000	148.00	3433.0	0.0074	SPC	N	N
3641	64.000	93.000	76.000	33.000	3433.0	0.0052	SPC	N	N
3642	64.000	93.000	43.000	116.00	3433.0	0.0062	SPC	N	N
3643	64.000	93.000	2.0000	178.00	3433.0	0.0068	SPC	N	N
3644	64.000	93.000	0.0000	376.00	3433.0	0.0064	SPC	N	N
3645	64.000	93.000	0.0000	503.00	3433.0	0.0067	SPC	N	N
3646	64.000	93.000	0.0000	593.00	3433.0	0.0075	SPC	N	N
3647	64.000	93.000	0.0000	579.00	3433.0	0.0073	SPC	N	N
3648	64.000	93.000	0.0000	579.00	3433.0	0.0065	SPC	N	N
3649	65.000	93.000	383.00	0.0000	2529.0	0.0132	SPC	N	N
3650	65.000	93.000	990.00	0.0000	2529.0	0.0128	SPC	N	N
3651	65.000	93.000	1101.0	0.0000	2529.0	0.0157	SPC	N	N
3652	65.000	93.000	1179.0	0.0000	2529.0	0.0155	SPC	N	N
3653	65.000	93.000	990.00	0.0000	2529.0	0.0160	SPC	N	N
3654	65.000	93.000	776.00	0.0000	2529.0	0.0134	SPC	N	N
3655	65.000	93.000	558.00	0.0000	2529.0	0.0105	SPC	N	N
3656	65.000	93.000	286.00	2.0000	2529.0	0.0079	SPC	N	N
3657	65.000	93.000	84.000	89.000	2529.0	0.0064	SPC	N	N
3658	65.000	93.000	0.0000	183.00	2529.0	0.0063	SPC	N	N
3659	65.000	93.000	0.0000	0.0000	2529.0	0.0072	SPC	N	N
3660	65.000	93.000	212.00	11.000	2529.0	0.0032	SPC	N	N
3661	66.000	93.000	0.0000	0.0000	7050.0	0.0169	SPC	N	N
3662	66.000	93.000	0.0000	0.0000	7050.0	0.0146	SPC	N	N
3663	66.000	93.000	0.0000	0.0000	7050.0	0.0138	SPC	N	N
3664	66.000	93.000	366.00	0.0000	7050.0	0.0154	SPC	N	N
3665	66.000	93.000	344.00	0.0000	7050.0	0.0141	SPC	N	N
3666	66.000	93.000	266.00	0.0000	7050.0	0.0137	SPC	N	N
3667	66.000	93.000	0.0000	0.0000	7050.0	0.0143	SPC	N	N
3668	66.000	93.000	0.0000	240.00	7050.0	0.0144	SPC	N	N
3669	66.000	93.000	5.0000	266.00	7050.0	0.0135	SPC	N	N
3670	66.000	93.000	0.0000	150.00	7050.0	0.0129	SPC	N	N
3671	66.000	93.000	0.0000	120.00	7050.0	0.0118	SPC	N	N
3672	66.000	93.000	0.0000	0.0000	7050.0	0.0120	SPC	N	N
3673	56.000	92.000	0.0000	301.00	3504.0	0.0192	SPC	N	N
3674	56.000	92.000	84.000	119.00	3504.0	0.0201	SPC	N	N
3675	56.000	92.000	78.000	94.000	3504.0	0.0183	SPC	N	N
3676	56.000	92.000	232.00	17.000	3504.0	0.0172	SPC	N	N
3677	56.000	92.000	113.00	63.000	3504.0	0.0171	SPC	N	N

3678	56.000	92.000	83.000	78.000	3504.0	0.0172	SPC	N	N
3679	56.000	92.000	37.000	137.00	3504.0	0.0183	SPC	N	N
3680	56.000	92.000	14.000	245.00	3504.0	0.0213	SPC	N	N
3681	56.000	92.000	0.0000	444.00	3504.0	0.0214	SPC	N	N
3682	56.000	92.000	0.0000	546.00	3504.0	0.0227	SPC	N	N
3683	56.000	92.000	0.0000	487.00	3504.0	0.0232	SPC	N	N
3684	56.000	92.000	0.0000	451.00	3504.0	0.0210	SPC	N	N
3685	57.000	92.000	0.0000	0.0000	322.00	0.1435	SPC	N	N
3686	57.000	92.000	0.0000	0.0000	322.00	0.0709	SPC	N	N
3687	57.000	92.000	0.0000	0.0000	322.00	0.0538	SPC	N	N
3688	57.000	92.000	0.0000	0.0000	322.00	0.0915	SPC	N	N
3689	57.000	92.000	0.0000	0.0000	322.00	0.0724	SPC	N	N
3690	57.000	92.000	0.0000	0.0000	322.00	0.0738	SPC	N	N
3691	57.000	92.000	0.0000	0.0000	322.00	0.0902	SPC	N	N
3692	57.000	92.000	0.0000	0.0000	322.00	0.0750	SPC	N	N
3693	57.000	92.000	0.0000	0.0000	322.00	0.0849	SPC	N	N
3694	57.000	92.000	0.0000	0.0000	322.00	0.0857	SPC	N	N
3695	57.000	92.000	0.0000	0.0000	322.00	0.0852	SPC	N	N
3696	57.000	92.000	0.0000	0.0000	322.00	0.0814	SPC	N	N
3697	58.000	92.000	90.000	123.00	115.00	0.0398	SPC	N	N
3698	58.000	92.000	443.00	0.0000	115.00	0.0357	SPC	N	N
3699	58.000	92.000	482.00	0.0000	115.00	0.0495	SPC	N	N
3700	58.000	92.000	592.00	0.0000	115.00	0.0499	SPC	N	N
3701	58.000	92.000	344.00	0.0000	115.00	0.0473	SPC	N	N
3702	58.000	92.000	199.00	3.0000	115.00	0.0418	SPC	N	N
3703	58.000	92.000	88.000	86.000	115.00	0.0384	SPC	N	N
3704	58.000	92.000	20.000	195.00	115.00	0.0442	SPC	N	N
3705	58.000	92.000	0.0000	432.00	115.00	0.0407	SPC	N	N
3706	58.000	92.000	0.0000	567.00	115.00	0.0402	SPC	N	N
3707	58.000	92.000	0.0000	450.00	115.00	0.0357	SPC	N	N
3708	58.000	92.000	0.0000	386.00	115.00	0.0410	SPC	N	N
3709	59.000	92.000	586.00	4.0000	3584.0	0.0111	SPC	N	N
3710	59.000	92.000	993.00	0.0000	3584.0	0.0161	SPC	N	N
3711	59.000	92.000	1031.0	0.0000	3584.0	0.0159	SPC	N	N
3712	59.000	92.000	1062.0	0.0000	3584.0	0.0144	SPC	N	N
3713	59.000	92.000	813.00	0.0000	3584.0	0.0143	SPC	N	N
3714	59.000	92.000	811.00	0.0000	3584.0	0.0124	SPC	N	N
3715	59.000	92.000	488.00	1.0000	3584.0	0.0110	SPC	N	N
3716	59.000	92.000	307.00	2.0000	3584.0	0.0097	SPC	N	N
3717	59.000	92.000	131.00	15.000	3584.0	0.0062	SPC	N	N
3718	59.000	92.000	63.000	58.000	3584.0	0.0098	SPC	N	N
3719	59.000	92.000	92.000	63.000	3584.0	0.0060	SPC	N	N
3720	59.000	92.000	161.00	16.000	3584.0	0.0093	SPC	N	N
3721	60.000	92.000	453.00	4.0000	1347.0	0.0236	SPC	N	N
3722	60.000	92.000	954.00	0.0000	1347.0	0.0237	SPC	N	N
3723	60.000	92.000	1048.0	0.0000	1347.0	0.0285	SPC	N	N
3724	60.000	92.000	998.00	0.0000	1347.0	0.0225	SPC	N	N
3725	60.000	92.000	0.0000	0.0000	1347.0	0.0211	SPC	N	N
3726	60.000	92.000	717.00	0.0000	1347.0	0.0227	SPC	N	N
3727	60.000	92.000	383.00	4.0000	1347.0	0.0247	SPC	N	N
3728	60.000	92.000	219.00	3.0000	1347.0	0.0189	SPC	N	N
3729	60.000	92.000	96.000	28.000	1347.0	0.0170	SPC	N	N
3730	60.000	92.000	12.000	131.00	1347.0	0.0166	SPC	N	N
3731	60.000	92.000	0.0000	0.0000	1347.0	0.0183	SPC	N	N
3732	60.000	92.000	91.000	32.000	1347.0	0.0192	SPC	N	N
3733	61.000	92.000	705.00	13.000	3067.0	0.0216	SPC	Y	N
3734	61.000	92.000	992.00	0.0000	3067.0	0.0220	SPC	Y	N
3735	61.000	92.000	925.00	0.0000	3067.0	0.0229	SPC	Y	N
3736	61.000	92.000	935.00	0.0000	3067.0	0.0262	SPC	Y	N
3737	61.000	92.000	819.00	0.0000	3067.0	0.0171	SPC	Y	N
3738	61.000	92.000	670.00	0.0000	3067.0	0.0192	SPC	Y	N
3739	61.000	92.000	454.00	7.0000	3067.0	0.0158	SPC	Y	N
3740	61.000	92.000	231.00	32.000	3067.0	0.0138	SPC	Y	N
3741	61.000	92.000	128.00	70.000	3067.0	0.0092	SPC	Y	N
3742	61.000	92.000	130.00	70.000	3067.0	0.0850	SPC	Y	N
3743	61.000	92.000	171.00	113.00	3067.0	0.0091	SPC	Y	N
3744	61.000	92.000	260.00	21.000	3067.0	0.0102	SPC	Y	N
3745	62.000	92.000	0.0000	0.0000	119.00	0.0276	SPC	N	N
3746	62.000	92.000	0.0000	0.0000	119.00	0.0281	SPC	N	N
3747	62.000	92.000	0.0000	0.0000	119.00	0.0327	SPC	N	N
3748	62.000	92.000	0.0000	0.0000	119.00	0.0400	SPC	N	N

3749	62.000	92.000	0.0000	0.0000	119.00	0.0345	SPC	N	N
3750	62.000	92.000	0.0000	0.0000	119.00	0.0291	SPC	N	N
3751	62.000	92.000	0.0000	0.0000	119.00	0.0287	SPC	N	N
3752	62.000	92.000	0.0000	0.0000	119.00	0.0220	SPC	N	N
3753	62.000	92.000	0.0000	0.0000	119.00	0.0183	SPC	N	N
3754	62.000	92.000	0.0000	0.0000	119.00	0.0193	SPC	N	N
3755	62.000	92.000	0.0000	0.0000	119.00	0.3720	SPC	N	N
3756	62.000	92.000	0.0000	0.0000	119.00	0.0369	SPC	N	N
3757	63.000	92.000	0.0000	0.0000	497.00	0.1424	SPC	N	N
3758	63.000	92.000	0.0000	0.0000	497.00	0.1465	SPC	N	N
3759	63.000	92.000	0.0000	0.0000	497.00	0.1285	SPC	N	N
3760	63.000	92.000	0.0000	0.0000	497.00	0.1447	SPC	N	N
3761	63.000	92.000	0.0000	0.0000	497.00	0.1398	SPC	N	N
3762	63.000	92.000	0.0000	0.0000	497.00	0.1473	SPC	N	N
3763	63.000	92.000	0.0000	0.0000	497.00	0.1295	SPC	N	N
3764	63.000	92.000	0.0000	0.0000	497.00	0.1309	SPC	N	N
3765	63.000	92.000	0.0000	0.0000	497.00	0.1420	SPC	N	N
3766	63.000	92.000	0.0000	0.0000	497.00	0.1284	SPC	N	N
3767	63.000	92.000	0.0000	0.0000	497.00	0.1325	SPC	N	N
3768	63.000	92.000	0.0000	0.0000	497.00	0.1357	SPC	N	N
3769	64.000	92.000	0.0000	400.00	3392.0	0.0072	SPC	N	N
3770	64.000	92.000	121.00	155.00	3392.0	0.0059	SPC	N	N
3771	64.000	92.000	38.000	148.00	3392.0	0.0071	SPC	N	N
3772	64.000	92.000	134.00	41.000	3392.0	0.0063	SPC	N	N
3773	64.000	92.000	49.000	91.000	3392.0	0.0058	SPC	N	N
3774	64.000	92.000	30.000	140.00	3392.0	0.0054	SPC	N	N
3775	64.000	92.000	10.000	194.00	3392.0	0.0064	SPC	N	N
3776	64.000	92.000	0.0000	296.00	3392.0	0.0074	SPC	N	N
3777	64.000	92.000	0.0000	475.00	3392.0	0.0041	SPC	N	N
3778	64.000	92.000	0.0000	556.00	3392.0	0.0083	SPC	N	N
3779	64.000	92.000	0.0000	513.00	3392.0	0.0090	SPC	N	N
3780	64.000	92.000	0.0000	543.00	3392.0	0.0079	SPC	N	N
3781	65.000	92.000	453.00	4.0000	2434.0	0.0157	SPC	N	N
3782	65.000	92.000	954.00	0.0000	2434.0	0.0151	SPC	N	N
3783	65.000	92.000	1048.0	0.0000	2434.0	0.0151	SPC	N	N
3784	65.000	92.000	998.00	0.0000	2434.0	0.0155	SPC	N	N
3785	65.000	92.000	788.00	0.0000	2434.0	0.0134	SPC	N	N
3786	65.000	92.000	717.00	0.0000	2434.0	0.0131	SPC	N	N
3787	65.000	92.000	383.00	0.0000	2434.0	0.0102	SPC	N	N
3788	65.000	92.000	219.00	3.0000	2434.0	0.0068	SPC	N	N
3789	65.000	92.000	96.000	28.000	2434.0	0.0065	SPC	N	N
3790	65.000	92.000	21.000	131.00	2434.0	0.0062	SPC	N	N
3791	65.000	92.000	53.000	106.00	2434.0	0.0070	SPC	N	N
3792	65.000	92.000	91.000	32.000	2434.0	0.0032	SPC	N	N
3793	66.000	92.000	0.0000	0.0000	7050.0	0.0133	SPC	N	N
3794	66.000	92.000	0.0000	0.0000	7050.0	0.0143	SPC	N	N
3795	66.000	92.000	0.0000	0.0000	7050.0	0.0132	SPC	N	N
3796	66.000	92.000	0.0000	0.0000	7050.0	0.0134	SPC	N	N
3797	66.000	92.000	0.0000	0.0000	7050.0	0.0131	SPC	N	N
3798	66.000	92.000	0.0000	0.0000	7050.0	0.0117	SPC	N	N
3799	66.000	92.000	0.0000	0.0000	7050.0	0.0133	SPC	N	N
3800	66.000	92.000	0.0000	0.0000	7050.0	0.0133	SPC	N	N
3801	66.000	92.000	0.0000	0.0000	7050.0	0.0110	SPC	N	N
3802	66.000	92.000	0.0000	0.0000	7050.0	0.0128	SPC	N	N
3803	66.000	92.000	0.0000	0.0000	7050.0	0.0127	SPC	N	N
3804	66.000	92.000	293.00	42.000	7050.0	0.0124	SPC	N	N
3805	56.000	91.000	7.0000	359.00	3447.0	0.0192	SPC	N	N
3806	56.000	91.000	19.000	158.00	3447.0	0.0195	SPC	N	N
3807	56.000	91.000	82.000	122.00	3447.0	0.0158	SPC	N	N
3808	56.000	91.000	92.000	103.00	3447.0	0.0173	SPC	N	N
3809	56.000	91.000	104.00	57.000	3447.0	0.0177	SPC	N	N
3810	56.000	91.000	77.000	120.00	3447.0	0.0180	SPC	N	N
3811	56.000	91.000	1.0000	260.00	3447.0	0.0181	SPC	N	N
3812	56.000	91.000	0.0000	402.00	3447.0	0.0181	SPC	N	N
3813	56.000	91.000	0.0000	438.00	3447.0	0.0208	SPC	N	N
3814	56.000	91.000	0.0000	517.00	3447.0	0.0209	SPC	N	N
3815	56.000	91.000	0.0000	520.00	3447.0	0.0224	SPC	N	N
3816	56.000	91.000	0.0000	438.00	3447.0	0.0210	SPC	N	N
3817	57.000	91.000	0.0000	0.0000	309.00	0.1027	SPC	N	N
3818	57.000	91.000	0.0000	0.0000	309.00	0.0993	SPC	N	N
3819	57.000	91.000	0.0000	0.0000	309.00	0.0990	SPC	N	N

3820	57.000	91.000	0.0000	0.0000	309.00	0.1127	SPC	N	N
3821	57.000	91.000	0.0000	0.0000	309.00	0.0711	SPC	N	N
3822	57.000	91.000	0.0000	0.0000	309.00	0.1119	SPC	N	N
3823	57.000	91.000	0.0000	0.0000	309.00	0.0924	SPC	N	N
3824	57.000	91.000	0.0000	0.0000	309.00	0.1053	SPC	N	N
3825	57.000	91.000	0.0000	0.0000	309.00	0.1126	SPC	N	N
3826	57.000	91.000	0.0000	0.0000	309.00	0.1064	SPC	N	N
3827	57.000	91.000	0.0000	0.0000	309.00	0.1002	SPC	N	N
3828	57.000	91.000	0.0000	0.0000	309.00	0.0793	SPC	N	N
3829	58.000	91.000	124.00	88.000	115.00	0.0432	SPC	N	N
3830	58.000	91.000	257.00	26.000	115.00	0.0383	SPC	N	N
3831	58.000	91.000	610.00	0.0000	115.00	0.0446	SPC	N	N
3832	58.000	91.000	651.00	0.0000	115.00	0.0368	SPC	N	N
3833	58.000	91.000	364.00	0.0000	115.00	0.0365	SPC	N	N
3834	58.000	91.000	214.00	30.000	115.00	0.0367	SPC	N	N
3835	58.000	91.000	38.000	98.000	115.00	0.0412	SPC	N	N
3836	58.000	91.000	8.0000	371.00	115.00	0.0377	SPC	N	N
3837	58.000	91.000	0.0000	413.00	115.00	0.0468	SPC	N	N
3838	58.000	91.000	0.0000	517.00	115.00	0.0404	SPC	N	N
3839	58.000	91.000	0.0000	581.00	115.00	0.0393	SPC	N	N
3840	58.000	91.000	33.000	248.00	115.00	0.0428	SPC	N	N
3841	59.000	91.000	558.00	0.0000	2976.0	0.0135	SPC	N	N
3842	59.000	91.000	784.00	0.0000	2976.0	0.0179	SPC	N	N
3843	59.000	91.000	1364.0	0.0000	2976.0	0.0254	SPC	N	N
3844	59.000	91.000	1231.0	0.0000	2976.0	0.0237	SPC	N	N
3845	59.000	91.000	799.00	0.0000	2976.0	0.0202	SPC	N	N
3846	59.000	91.000	879.00	0.0000	2976.0	0.0128	SPC	N	N
3847	59.000	91.000	712.00	0.0000	2976.0	0.0157	SPC	N	N
3848	59.000	91.000	385.00	0.0000	2976.0	0.0121	SPC	N	N
3849	59.000	91.000	95.000	28.000	2976.0	0.0074	SPC	N	N
3850	59.000	91.000	40.000	111.00	2976.0	0.0082	SPC	N	N
3851	59.000	91.000	0.0000	0.0000	2976.0	0.0067	SPC	N	N
3852	59.000	91.000	0.0000	0.0000	2976.0	0.0080	SPC	N	N
3853	60.000	91.000	473.00	0.0000	1343.0	0.0198	SPC	N	N
3854	60.000	91.000	663.00	0.0000	1343.0	0.0225	SPC	N	N
3855	60.000	91.000	1258.0	0.0000	1343.0	0.0230	SPC	N	N
3856	60.000	91.000	1142.0	0.0000	1343.0	0.0230	SPC	N	N
3857	60.000	91.000	750.00	0.0000	1343.0	0.0192	SPC	N	N
3858	60.000	91.000	773.00	0.0000	1343.0	0.0212	SPC	N	N
3859	60.000	91.000	568.00	0.0000	1343.0	0.0161	SPC	N	N
3860	60.000	91.000	219.00	8.0000	1343.0	0.0189	SPC	N	N
3861	60.000	91.000	33.000	101.00	1343.0	0.0196	SPC	N	N
3862	60.000	91.000	16.000	161.00	1343.0	0.0163	SPC	N	N
3863	60.000	91.000	16.000	120.00	1343.0	0.0163	SPC	N	N
3864	60.000	91.000	0.0000	0.0000	1343.0	0.0159	SPC	N	N
3865	61.000	91.000	460.00	0.0000	3539.0	0.0186	SPC	Y	N
3866	61.000	91.000	711.00	0.0000	3539.0	0.0172	SPC	Y	N
3867	61.000	91.000	0.0000	0.0000	3539.0	0.0354	SPC	Y	N
3868	61.000	91.000	0.0000	0.0000	3539.0	0.0250	SPC	Y	N
3869	61.000	91.000	647.00	0.0000	3539.0	0.0217	SPC	Y	N
3870	61.000	91.000	848.00	0.0000	3539.0	0.0211	SPC	Y	N
3871	61.000	91.000	0.0000	0.0000	3539.0	0.0191	SPC	Y	N
3872	61.000	91.000	0.0000	0.0000	3539.0	0.0177	SPC	Y	N
3873	61.000	91.000	16.000	12.000	3539.0	0.0129	SPC	Y	N
3874	61.000	91.000	4.0000	226.00	3539.0	0.0088	SPC	Y	N
3875	61.000	91.000	0.0000	0.0000	3539.0	0.0093	SPC	Y	N
3876	61.000	91.000	0.0000	0.0000	3539.0	0.0110	SPC	Y	N
3877	62.000	91.000	0.0000	0.0000	119.00	0.0236	SPC	N	N
3878	62.000	91.000	0.0000	0.0000	119.00	0.0321	SPC	N	N
3879	62.000	91.000	0.0000	0.0000	119.00	0.0332	SPC	N	N
3880	62.000	91.000	0.0000	0.0000	119.00	0.0396	SPC	N	N
3881	62.000	91.000	0.0000	0.0000	119.00	0.0319	SPC	N	N
3882	62.000	91.000	0.0000	0.0000	119.00	0.0372	SPC	N	N
3883	62.000	91.000	0.0000	0.0000	119.00	0.0288	SPC	N	N
3884	62.000	91.000	0.0000	0.0000	119.00	0.0261	SPC	N	N
3885	62.000	91.000	0.0000	0.0000	119.00	0.0231	SPC	N	N
3886	62.000	91.000	0.0000	0.0000	119.00	0.0225	SPC	N	N
3887	62.000	91.000	0.0000	0.0000	119.00	0.0227	SPC	N	N
3888	62.000	91.000	0.0000	0.0000	119.00	0.0237	SPC	N	N
3889	63.000	91.000	0.0000	0.0000	497.00	0.1501	SPC	N	N
3890	63.000	91.000	0.0000	0.0000	497.00	0.1395	SPC	N	N

3891	63.000	91.000	0.0000	0.0000	497.00	0.1441	SPC	N	N
3892	63.000	91.000	0.0000	0.0000	497.00	0.1513	SPC	N	N
3893	63.000	91.000	0.0000	0.0000	497.00	0.1394	SPC	N	N
3894	63.000	91.000	0.0000	0.0000	497.00	0.1449	SPC	N	N
3895	63.000	91.000	0.0000	0.0000	497.00	0.1488	SPC	N	N
3896	63.000	91.000	0.0000	0.0000	497.00	0.1320	SPC	N	N
3897	63.000	91.000	0.0000	0.0000	497.00	0.1328	SPC	N	N
3898	63.000	91.000	0.0000	0.0000	497.00	0.1489	SPC	N	N
3899	63.000	91.000	0.0000	0.0000	497.00	0.1388	SPC	N	N
3900	63.000	91.000	0.0000	0.0000	497.00	0.1439	SPC	N	N
3901	64.000	91.000	5.0000	423.00	3420.0	0.0047	SPC	N	N
3902	64.000	91.000	3.0000	215.00	3420.0	0.0046	SPC	N	N
3903	64.000	91.000	36.000	159.00	3420.0	0.0048	SPC	N	N
3904	64.000	91.000	55.000	149.00	3420.0	0.0068	SPC	N	N
3905	64.000	91.000	69.000	97.000	3420.0	0.0067	SPC	N	N
3906	64.000	91.000	34.000	149.00	3420.0	0.0064	SPC	N	N
3907	64.000	91.000	2.0000	319.00	3420.0	0.0057	SPC	N	N
3908	64.000	91.000	0.0000	469.00	3420.0	0.0064	SPC	N	N
3909	64.000	91.000	0.0000	503.00	3420.0	0.0070	SPC	N	N
3910	64.000	91.000	0.0000	535.00	3420.0	0.0070	SPC	N	N
3911	64.000	91.000	0.0000	558.00	3420.0	0.0076	SPC	N	N
3912	64.000	91.000	0.0000	542.00	3420.0	0.0071	SPC	N	N
3913	65.000	91.000	473.00	0.0000	2434.0	0.0150	SPC	N	N
3914	65.000	91.000	663.00	0.0000	2434.0	0.0114	SPC	N	N
3915	65.000	91.000	1258.0	0.0000	2434.0	0.0180	SPC	N	N
3916	65.000	91.000	1142.0	0.0000	2434.0	0.0179	SPC	N	N
3917	65.000	91.000	750.00	0.0000	2434.0	0.0145	SPC	N	N
3918	65.000	91.000	773.00	0.0000	2434.0	0.0149	SPC	N	N
3919	65.000	91.000	568.00	0.0000	2434.0	0.0130	SPC	N	N
3920	65.000	91.000	219.00	8.0000	2434.0	0.0085	SPC	N	N
3921	65.000	91.000	33.000	101.00	2434.0	0.0063	SPC	N	N
3922	65.000	91.000	16.000	161.00	2434.0	0.0051	SPC	N	N
3923	65.000	91.000	16.000	120.00	2434.0	0.0070	SPC	N	N
3924	65.000	91.000	145.00	15.000	2434.0	0.0022	SPC	N	N
3925	66.000	91.000	180.00	6.0000	7037.0	0.0129	SPC	N	N
3926	66.000	91.000	257.00	5.0000	7037.0	0.0142	SPC	N	N
3927	66.000	91.000	485.00	0.0000	7037.0	0.0168	SPC	N	N
3928	66.000	91.000	397.00	0.0000	7037.0	0.0180	SPC	N	N
3929	66.000	91.000	313.00	0.0000	7037.0	0.0179	SPC	N	N
3930	66.000	91.000	452.00	0.0000	7037.0	0.0179	SPC	N	N
3931	66.000	91.000	0.0000	0.0000	7037.0	0.0155	SPC	N	N
3932	66.000	91.000	0.0000	0.0000	7037.0	0.0154	SPC	N	N
3933	66.000	91.000	0.0000	0.0000	7037.0	0.0146	SPC	N	N
3934	66.000	91.000	0.0000	0.0000	7037.0	0.0139	SPC	N	N
3935	66.000	91.000	0.0000	0.0000	7037.0	0.0138	SPC	N	N
3936	66.000	91.000	0.0000	0.0000	7037.0	0.0131	SPC	N	N

Appendix B

STATISTIX 4.1 CH3DATA, 10/07/95, 11:18

VIEW DATA

CASE	BASE	CDD	CMD	FLY	FY	HDD	MBTU	SQFT
1	1	3	AMC	Y	94	319	0.0106	5898.0
2	1	9	AMC	Y	94	567	0.0200	5898.0
3	1	0	AMC	Y	94	914	0.0256	5898.0
4	1	0	AMC	Y	94	1180	0.0312	5898.0
5	1	0	AMC	Y	94	863	0.0297	5898.0
6	1	3	AMC	Y	94	672	0.0272	5898.0
7	1	42	AMC	Y	94	216	0.0137	5898.0
8	1	39	AMC	Y	94	209	0.0081	5898.0
9	1	322	AMC	Y	94	5	0.0095	5898.0
10	1	452	AMC	Y	94	0	0.0108	5898.0
11	1	241	AMC	Y	94	3	0.0103	5898.0
12	1	102	AMC	Y	94	20	0.0108	5898.0
13	2	127	AMC	Y	94	49	0.0087	2944.0
14	2	42	AMC	Y	94	206	0.0117	2944.0
15	2	0	AMC	Y	94	504	0.0172	2944.0
16	2	0	AMC	Y	94	568	0.0192	2944.0
17	2	7	AMC	Y	94	327	0.0153	2944.0
18	2	42	AMC	Y	94	152	0.0130	2944.0
19	2	133	AMC	Y	94	30	0.0052	2944.0
20	2	210	AMC	Y	94	11	0.0056	2944.0
21	2	489	AMC	Y	94	0	0.0061	2944.0
22	2	537	AMC	Y	94	0	0.0072	2944.0
23	2	473	AMC	Y	94	0	0.0064	2944.0
24	2	327	AMC	Y	94	0	0.0044	2944.0
25	3	5	AMC	Y	94	284	0.0111	3349.0
26	3	7	AMC	Y	94	540	0.0170	3349.0
27	3	0	AMC	Y	94	898	0.0237	3349.0
28	3	0	AMC	Y	94	1145	0.0262	3349.0
29	3	0	AMC	Y	94	872	0.0227	3349.0
30	3	0	AMC	Y	94	690	0.0225	3349.0
31	3	21	AMC	Y	94	234	0.0146	3349.0
32	3	41	AMC	Y	94	191	0.0094	3349.0
33	3	303	AMC	Y	94	5	0.0092	3349.0
34	3	433	AMC	Y	94	0	0.0094	3349.0
37	4	0	AMC	Y	94	535	0.0139	4394.0
38	4	0	AMC	Y	94	1130	0.0219	4394.0
39	4	0	AMC	Y	94	1116	0.0237	4394.0
40	4	0	AMC	Y	94	965	0.0223	4394.0
41	4	0	AMC	Y	94	1070	0.0222	4394.0
42	4	0	AMC	Y	94	784	0.0187	4394.0
43	4	0	AMC	Y	94	544	0.0144	4394.0
44	4	0	AMC	Y	94	386	0.0105	4394.0
45	4	0	AMC	Y	94	209	0.0070	4394.0
46	4	207	AMC	Y	94	47	0.0063	4394.0
47	4	106	AMC	Y	94	53	0.0067	4394.0

48	4	8	AMC	Y	94	141	0.0079	4394.0
49	5	0	AMC	Y	94	705	0.0231	3821.0
50	5	0	AMC	Y	94	1283	0.0266	3821.0
51	5	0	AMC	Y	94	1563	0.0324	3821.0
52	5	0	AMC	Y	94	2198	0.0272	3821.0
53	5	0	AMC	Y	94	1743	0.0290	3821.0
54	5	0	AMC	Y	94	1051	0.0243	3821.0
55	5	0	AMC	Y	94	652	0.0219	3821.0
56	5	40	AMC	Y	94	212	0.0167	3821.0
57	5	79	AMC	Y	94	17	0.0146	3821.0
58	5	84	AMC	Y	94	12	0.0135	3821.0
59	5	134	AMC	Y	94	61	0.0155	3821.0
60	5	54	AMC	Y	94	165	0.0138	3821.0
61	6	0	AMC	Y	94	449	0.0178	2315.0
62	6	0	AMC	Y	94	766	0.0242	2315.0
63	6	0	AMC	Y	94	1104	0.0282	2315.0
64	6	0	AMC	Y	94	1477	0.0291	2315.0
65	6	0	AMC	Y	94	1209	0.0270	2315.0
66	6	0	AMC	Y	94	1040	0.0266	2315.0
67	6	22	AMC	Y	94	393	0.0189	2315.0
68	6	63	AMC	Y	94	197	0.0139	2315.0
69	6	266	AMC	Y	94	18	0.0120	2315.0
73	7	114	AMC	Y	94	10	0.0073	3719.0
74	7	10	AMC	Y	94	178	0.0084	3719.0
75	7	0	AMC	Y	94	367	0.0104	3719.0
76	7	0	AMC	Y	94	289	0.0104	3719.0
77	7	0	AMC	Y	94	383	0.0107	3719.0
78	7	1	AMC	Y	94	228	0.0092	3719.0
79	7	25	AMC	Y	94	178	0.0081	3719.0
80	7	32	AMC	Y	94	96	0.0071	3719.0
81	7	319	AMC	Y	94	0	0.0075	3719.0
82	7	366	AMC	Y	94	0	0.0087	3719.0
83	7	515	AMC	Y	94	0	0.0083	3719.0
84	7	285	AMC	Y	94	1	0.0082	3719.0

Appendix C

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VIEW DATA

CASE	BASE	FY	AGE	SFMAINT	SQFT	MAINT
25	35.000	94.000	24.000	1880.0	2339.0	0.8038
26	35.000	94.000	24.000	1880.0	2339.0	0.8038
27	35.000	94.000	24.000	1880.0	2339.0	0.8038
28	35.000	94.000	24.000	1880.0	2339.0	0.8038
29	35.000	94.000	24.000	1880.0	2339.0	0.8038
30	35.000	94.000	24.000	1880.0	2339.0	0.8038
31	35.000	94.000	24.000	1880.0	2339.0	0.8038
32	35.000	94.000	24.000	1880.0	2339.0	0.8038
33	35.000	94.000	24.000	1880.0	2339.0	0.8038
34	35.000	94.000	24.000	1880.0	2339.0	0.8038
35	35.000	94.000	24.000	1880.0	2339.0	0.8038
36	35.000	94.000	24.000	1880.0	2339.0	0.8038
97	41.000	94.000	24.000	1590.0	4624.0	0.3439
98	41.000	94.000	24.000	1590.0	4624.0	0.3439
99	41.000	94.000	24.000	1590.0	4624.0	0.3439
100	41.000	94.000	24.000	1590.0	4624.0	0.3439
101	41.000	94.000	24.000	1590.0	4624.0	0.3439
102	41.000	94.000	24.000	1590.0	4624.0	0.3439
103	41.000	94.000	24.000	1590.0	4624.0	0.3439
104	41.000	94.000	24.000	1590.0	4624.0	0.3439
105	41.000	94.000	24.000	1590.0	4624.0	0.3439
106	41.000	94.000	24.000	1590.0	4624.0	0.3439
107	41.000	94.000	24.000	1590.0	4624.0	0.3439
108	41.000	94.000	24.000	1590.0	4624.0	0.3439
133	44.000	94.000	29.000	945.00	3160.0	0.2991
134	44.000	94.000	29.000	945.00	3160.0	0.2991
135	44.000	94.000	29.000	945.00	3160.0	0.2991
136	44.000	94.000	29.000	945.00	3160.0	0.2991
137	44.000	94.000	29.000	945.00	3160.0	0.2991
138	44.000	94.000	29.000	945.00	3160.0	0.2991
139	44.000	94.000	29.000	945.00	3160.0	0.2991
140	44.000	94.000	29.000	945.00	3160.0	0.2991
141	44.000	94.000	29.000	945.00	3160.0	0.2991
142	44.000	94.000	29.000	945.00	3160.0	0.2991
143	44.000	94.000	29.000	945.00	3160.0	0.2991
144	44.000	94.000	29.000	945.00	3160.0	0.2991
157	46.000	94.000	28.000	934.00	3867.0	0.2415
158	46.000	94.000	28.000	934.00	3867.0	0.2415
159	46.000	94.000	28.000	934.00	3867.0	0.2415
160	46.000	94.000	28.000	934.00	3867.0	0.2415
161	46.000	94.000	28.000	934.00	3867.0	0.2415
162	46.000	94.000	28.000	934.00	3867.0	0.2415
163	46.000	94.000	28.000	934.00	3867.0	0.2415
164	46.000	94.000	28.000	934.00	3867.0	0.2415
165	46.000	94.000	28.000	934.00	3867.0	0.2415
166	46.000	94.000	28.000	934.00	3867.0	0.2415
167	46.000	94.000	28.000	934.00	3867.0	0.2415
168	46.000	94.000	28.000	934.00	3867.0	0.2415
181	48.000	94.000	23.000	682.00	1847.0	0.3692
182	48.000	94.000	23.000	682.00	1847.0	0.3692
183	48.000	94.000	23.000	682.00	1847.0	0.3692
185	48.000	94.000	23.000	682.00	1847.0	0.3692
187	48.000	94.000	23.000	682.00	1847.0	0.3692
188	48.000	94.000	23.000	682.00	1847.0	0.3692
190	48.000	94.000	23.000	682.00	1847.0	0.3692
191	48.000	94.000	23.000	682.00	1847.0	0.3692
192	48.000	94.000	23.000	682.00	1847.0	0.3692
193	49.000	94.000	26.000	796.00	2478.0	0.3212

194	49.000	94.000	26.000	796.00	2478.0	0.3212
195	49.000	94.000	26.000	796.00	2478.0	0.3212
196	49.000	94.000	26.000	796.00	2478.0	0.3212
197	49.000	94.000	26.000	796.00	2478.0	0.3212
198	49.000	94.000	26.000	796.00	2478.0	0.3212
199	49.000	94.000	26.000	796.00	2478.0	0.3212
200	49.000	94.000	26.000	796.00	2478.0	0.3212
201	49.000	94.000	26.000	796.00	2478.0	0.3212
202	49.000	94.000	26.000	796.00	2478.0	0.3212
203	49.000	94.000	26.000	796.00	2478.0	0.3212
204	49.000	94.000	26.000	796.00	2478.0	0.3212
217	51.000	94.000	34.000	1343.0	5779.0	0.2324
218	51.000	94.000	34.000	1343.0	5779.0	0.2324
219	51.000	94.000	34.000	1343.0	5779.0	0.2324
220	51.000	94.000	34.000	1343.0	5779.0	0.2324
221	51.000	94.000	34.000	1343.0	5779.0	0.2324
222	51.000	94.000	34.000	1343.0	5779.0	0.2324
223	51.000	94.000	34.000	1343.0	5779.0	0.2324
224	51.000	94.000	34.000	1343.0	5779.0	0.2324
225	51.000	94.000	34.000	1343.0	5779.0	0.2324
241	53.000	94.000	25.000	896.00	2708.0	0.3309
242	53.000	94.000	25.000	896.00	2708.0	0.3309
243	53.000	94.000	25.000	896.00	2708.0	0.3309
244	53.000	94.000	25.000	896.00	2708.0	0.3309
245	53.000	94.000	25.000	896.00	2708.0	0.3309
246	53.000	94.000	25.000	896.00	2708.0	0.3309
247	53.000	94.000	25.000	896.00	2708.0	0.3309
248	53.000	94.000	25.000	896.00	2708.0	0.3309
249	53.000	94.000	25.000	896.00	2708.0	0.3309
250	53.000	94.000	25.000	896.00	2708.0	0.3309
251	53.000	94.000	25.000	896.00	2708.0	0.3309
252	53.000	94.000	25.000	896.00	2708.0	0.3309
253	54.000	94.000	25.000	920.00	2910.0	0.3162
254	54.000	94.000	25.000	920.00	2910.0	0.3162
255	54.000	94.000	25.000	920.00	2910.0	0.3162
256	54.000	94.000	25.000	920.00	2910.0	0.3162
257	54.000	94.000	25.000	920.00	2910.0	0.3162
258	54.000	94.000	25.000	920.00	2910.0	0.3162
259	54.000	94.000	25.000	920.00	2910.0	0.3162
260	54.000	94.000	25.000	920.00	2910.0	0.3162
261	54.000	94.000	25.000	920.00	2910.0	0.3162
262	54.000	94.000	25.000	920.00	2910.0	0.3162
263	54.000	94.000	25.000	920.00	2910.0	0.3162
264	54.000	94.000	25.000	920.00	2910.0	0.3162
301	35.000	93.000	23.000	1880.0	2295.0	0.8192
302	35.000	93.000	23.000	1880.0	2295.0	0.8192
303	35.000	93.000	23.000	1880.0	2295.0	0.8192
304	35.000	93.000	23.000	1880.0	2295.0	0.8192
305	35.000	93.000	23.000	1880.0	2295.0	0.8192
306	35.000	93.000	23.000	1880.0	2295.0	0.8192
307	35.000	93.000	23.000	1880.0	2295.0	0.8192
308	35.000	93.000	23.000	1880.0	2295.0	0.8192
309	35.000	93.000	23.000	1880.0	2295.0	0.8192
310	35.000	93.000	23.000	1880.0	2295.0	0.8192
311	35.000	93.000	23.000	1880.0	2295.0	0.8192
312	35.000	93.000	23.000	1880.0	2295.0	0.8192
373	41.000	93.000	22.000	1590.0	4479.0	0.3550
374	41.000	93.000	22.000	1590.0	4479.0	0.3550
375	41.000	93.000	22.000	1590.0	4479.0	0.3550
376	41.000	93.000	22.000	1590.0	4479.0	0.3550
377	41.000	93.000	22.000	1590.0	4479.0	0.3550
378	41.000	93.000	22.000	1590.0	4479.0	0.3550
381	41.000	93.000	22.000	1590.0	4479.0	0.3550
382	41.000	93.000	22.000	1590.0	4479.0	0.3550
383	41.000	93.000	22.000	1590.0	4479.0	0.3550
384	41.000	93.000	22.000	1590.0	4479.0	0.3550
409	44.000	93.000	28.000	945.00	3121.0	0.3028

410	44.000	93.000	28.000	945.00	3121.0	0.3028
411	44.000	93.000	28.000	945.00	3121.0	0.3028
412	44.000	93.000	28.000	945.00	3121.0	0.3028
413	44.000	93.000	28.000	945.00	3121.0	0.3028
414	44.000	93.000	28.000	945.00	3121.0	0.3028
415	44.000	93.000	28.000	945.00	3121.0	0.3028
416	44.000	93.000	28.000	945.00	3121.0	0.3028
417	44.000	93.000	28.000	945.00	3121.0	0.3028
418	44.000	93.000	28.000	945.00	3121.0	0.3028
419	44.000	93.000	28.000	945.00	3121.0	0.3028
420	44.000	93.000	28.000	945.00	3121.0	0.3028
433	46.000	93.000	27.000	934.00	3831.0	0.2438
434	46.000	93.000	27.000	934.00	3831.0	0.2438
435	46.000	93.000	27.000	934.00	3831.0	0.2438
436	46.000	93.000	27.000	934.00	3831.0	0.2438
437	46.000	93.000	27.000	934.00	3831.0	0.2438
438	46.000	93.000	27.000	934.00	3831.0	0.2438
439	46.000	93.000	27.000	934.00	3831.0	0.2438
440	46.000	93.000	27.000	934.00	3831.0	0.2438
441	46.000	93.000	27.000	934.00	3831.0	0.2438
442	46.000	93.000	27.000	934.00	3831.0	0.2438
443	46.000	93.000	27.000	934.00	3831.0	0.2438
444	46.000	93.000	27.000	934.00	3831.0	0.2438
457	48.000	93.000	22.000	681.00	1826.0	0.3729
458	48.000	93.000	22.000	681.00	1826.0	0.3729
459	48.000	93.000	22.000	681.00	1826.0	0.3729
460	48.000	93.000	22.000	681.00	1826.0	0.3729
461	48.000	93.000	22.000	681.00	1826.0	0.3729
462	48.000	93.000	22.000	681.00	1826.0	0.3729
463	48.000	93.000	22.000	681.00	1826.0	0.3729
464	48.000	93.000	22.000	681.00	1826.0	0.3729
465	48.000	93.000	22.000	681.00	1826.0	0.3729
466	48.000	93.000	22.000	681.00	1826.0	0.3729
467	48.000	93.000	22.000	681.00	1826.0	0.3729
468	48.000	93.000	22.000	681.00	1826.0	0.3729
469	49.000	93.000	25.000	796.00	2462.0	0.3233
470	49.000	93.000	25.000	796.00	2462.0	0.3233
471	49.000	93.000	25.000	796.00	2462.0	0.3233
472	49.000	93.000	25.000	796.00	2462.0	0.3233
473	49.000	93.000	25.000	796.00	2462.0	0.3233
474	49.000	93.000	25.000	796.00	2462.0	0.3233
475	49.000	93.000	25.000	796.00	2462.0	0.3233
476	49.000	93.000	25.000	796.00	2462.0	0.3233
477	49.000	93.000	25.000	796.00	2462.0	0.3233
478	49.000	93.000	25.000	796.00	2462.0	0.3233
479	49.000	93.000	25.000	796.00	2462.0	0.3233
480	49.000	93.000	25.000	796.00	2462.0	0.3233
493	51.000	93.000	33.000	1343.0	6015.0	0.2233
494	51.000	93.000	33.000	1343.0	6015.0	0.2233
495	51.000	93.000	33.000	1343.0	6015.0	0.2233
496	51.000	93.000	33.000	1343.0	6015.0	0.2233
497	51.000	93.000	33.000	1343.0	6015.0	0.2233
498	51.000	93.000	33.000	1343.0	6015.0	0.2233
499	51.000	93.000	33.000	1343.0	6015.0	0.2233
500	51.000	93.000	33.000	1343.0	6015.0	0.2233
501	51.000	93.000	33.000	1343.0	6015.0	0.2233
502	51.000	93.000	33.000	1343.0	6015.0	0.2233
503	51.000	93.000	33.000	1343.0	6015.0	0.2233
504	51.000	93.000	33.000	1343.0	6015.0	0.2233
517	53.000	93.000	24.000	896.00	2684.0	0.3338
518	53.000	93.000	24.000	896.00	2684.0	0.3338
519	53.000	93.000	24.000	896.00	2684.0	0.3338
520	53.000	93.000	24.000	896.00	2684.0	0.3338
521	53.000	93.000	24.000	896.00	2684.0	0.3338
522	53.000	93.000	24.000	896.00	2684.0	0.3338
523	53.000	93.000	24.000	896.00	2684.0	0.3338
524	53.000	93.000	24.000	896.00	2684.0	0.3338

525	53.000	93.000	24.000	896.00	2684.0	0.3338
526	53.000	93.000	24.000	896.00	2684.0	0.3338
527	53.000	93.000	24.000	896.00	2684.0	0.3338
528	53.000	93.000	24.000	896.00	2684.0	0.3338
529	54.000	93.000	24.000	920.00	2910.0	0.3162
531	54.000	93.000	24.000	920.00	2910.0	0.3162
532	54.000	93.000	24.000	920.00	2910.0	0.3162
534	54.000	93.000	24.000	920.00	2910.0	0.3162
535	54.000	93.000	24.000	920.00	2910.0	0.3162
536	54.000	93.000	24.000	920.00	2910.0	0.3162
537	54.000	93.000	24.000	920.00	2910.0	0.3162
538	54.000	93.000	24.000	920.00	2910.0	0.3162
539	54.000	93.000	24.000	920.00	2910.0	0.3162
540	54.000	93.000	24.000	920.00	2910.0	0.3162
577	35.000	92.000	22.000	1880.0	2129.0	0.8830
578	35.000	92.000	22.000	1880.0	2129.0	0.8830
579	35.000	92.000	22.000	1880.0	2129.0	0.8830
580	35.000	92.000	22.000	1880.0	2129.0	0.8830
581	35.000	92.000	22.000	1880.0	2129.0	0.8830
582	35.000	92.000	22.000	1880.0	2129.0	0.8830
583	35.000	92.000	22.000	1880.0	2129.0	0.8830
584	35.000	92.000	22.000	1880.0	2129.0	0.8830
585	35.000	92.000	22.000	1880.0	2129.0	0.8830
586	35.000	92.000	22.000	1880.0	2129.0	0.8830
587	35.000	92.000	22.000	1880.0	2129.0	0.8830
588	35.000	92.000	22.000	1880.0	2129.0	0.8830
649	41.000	92.000	21.000	1590.0	4023.0	0.3952
650	41.000	92.000	21.000	1590.0	4023.0	0.3952
651	41.000	92.000	21.000	1590.0	4023.0	0.3952
652	41.000	92.000	21.000	1590.0	4023.0	0.3952
653	41.000	92.000	21.000	1590.0	4023.0	0.3952
654	41.000	92.000	21.000	1590.0	4023.0	0.3952
655	41.000	92.000	21.000	1590.0	4023.0	0.3952
656	41.000	92.000	21.000	1590.0	4023.0	0.3952
657	41.000	92.000	21.000	1590.0	4023.0	0.3952
658	41.000	92.000	21.000	1590.0	4023.0	0.3952
660	41.000	92.000	21.000	1590.0	4023.0	0.3952
685	44.000	92.000	27.000	945.00	2875.0	0.3287
686	44.000	92.000	27.000	945.00	2875.0	0.3287
687	44.000	92.000	27.000	945.00	2875.0	0.3287
688	44.000	92.000	27.000	945.00	2875.0	0.3287
689	44.000	92.000	27.000	945.00	2875.0	0.3287
690	44.000	92.000	27.000	945.00	2875.0	0.3287
691	44.000	92.000	27.000	945.00	2875.0	0.3287
692	44.000	92.000	27.000	945.00	2875.0	0.3287
693	44.000	92.000	27.000	945.00	2875.0	0.3287
694	44.000	92.000	27.000	945.00	2875.0	0.3287
695	44.000	92.000	27.000	945.00	2875.0	0.3287
696	44.000	92.000	27.000	945.00	2875.0	0.3287
709	46.000	92.000	26.000	934.00	3773.0	0.2475
710	46.000	92.000	26.000	934.00	3773.0	0.2475
711	46.000	92.000	26.000	934.00	3773.0	0.2475
712	46.000	92.000	26.000	934.00	3773.0	0.2475
713	46.000	92.000	26.000	934.00	3773.0	0.2475
714	46.000	92.000	26.000	934.00	3773.0	0.2475
715	46.000	92.000	26.000	934.00	3773.0	0.2475
716	46.000	92.000	26.000	934.00	3773.0	0.2475
717	46.000	92.000	26.000	934.00	3773.0	0.2475
718	46.000	92.000	26.000	934.00	3773.0	0.2475
719	46.000	92.000	26.000	934.00	3773.0	0.2475
720	46.000	92.000	26.000	934.00	3773.0	0.2475
733	48.000	92.000	21.000	682.00	1774.0	0.3844
734	48.000	92.000	21.000	682.00	1774.0	0.3844
735	48.000	92.000	21.000	682.00	1774.0	0.3844
736	48.000	92.000	21.000	682.00	1774.0	0.3844
737	48.000	92.000	21.000	682.00	1774.0	0.3844
738	48.000	92.000	21.000	682.00	1774.0	0.3844

739	48.000	92.000	21.000	682.00	1774.0	0.3844
740	48.000	92.000	21.000	682.00	1774.0	0.3844
741	48.000	92.000	21.000	682.00	1774.0	0.3844
742	48.000	92.000	21.000	682.00	1774.0	0.3844
743	48.000	92.000	21.000	682.00	1774.0	0.3844
744	48.000	92.000	21.000	682.00	1774.0	0.3844
745	49.000	92.000	24.000	796.00	2329.0	0.3418
746	49.000	92.000	24.000	796.00	2329.0	0.3418
747	49.000	92.000	24.000	796.00	2329.0	0.3418
748	49.000	92.000	24.000	796.00	2329.0	0.3418
749	49.000	92.000	24.000	796.00	2329.0	0.3418
750	49.000	92.000	24.000	796.00	2329.0	0.3418
751	49.000	92.000	24.000	796.00	2329.0	0.3418
752	49.000	92.000	24.000	796.00	2329.0	0.3418
753	49.000	92.000	24.000	796.00	2329.0	0.3418
754	49.000	92.000	24.000	796.00	2329.0	0.3418
755	49.000	92.000	24.000	796.00	2329.0	0.3418
756	49.000	92.000	24.000	796.00	2329.0	0.3418
769	51.000	92.000	23.000	1343.0	6015.0	0.2233
770	51.000	92.000	23.000	1343.0	6015.0	0.2233
771	51.000	92.000	23.000	1343.0	6015.0	0.2233
772	51.000	92.000	23.000	1343.0	6015.0	0.2233
773	51.000	92.000	23.000	1343.0	6015.0	0.2233
774	51.000	92.000	23.000	1343.0	6015.0	0.2233
775	51.000	92.000	23.000	1343.0	6015.0	0.2233
776	51.000	92.000	23.000	1343.0	6015.0	0.2233
777	51.000	92.000	23.000	1343.0	6015.0	0.2233
778	51.000	92.000	23.000	1343.0	6015.0	0.2233
779	51.000	92.000	23.000	1343.0	6015.0	0.2233
780	51.000	92.000	23.000	1343.0	6015.0	0.2233
793	53.000	92.000	23.000	896.00	2639.0	0.3395
794	53.000	92.000	23.000	896.00	2639.0	0.3395
795	53.000	92.000	23.000	896.00	2639.0	0.3395
796	53.000	92.000	23.000	896.00	2639.0	0.3395
797	53.000	92.000	23.000	896.00	2639.0	0.3395
798	53.000	92.000	23.000	896.00	2639.0	0.3395
799	53.000	92.000	23.000	896.00	2639.0	0.3395
800	53.000	92.000	23.000	896.00	2639.0	0.3395
801	53.000	92.000	23.000	896.00	2639.0	0.3395
802	53.000	92.000	23.000	896.00	2639.0	0.3395
803	53.000	92.000	23.000	896.00	2639.0	0.3395
804	53.000	92.000	23.000	896.00	2639.0	0.3395
805	54.000	92.000	23.000	920.00	2834.0	0.3246
806	54.000	92.000	23.000	920.00	2834.0	0.3246
807	54.000	92.000	23.000	920.00	2834.0	0.3246
809	54.000	92.000	23.000	920.00	2834.0	0.3246
810	54.000	92.000	23.000	920.00	2834.0	0.3246
811	54.000	92.000	23.000	920.00	2834.0	0.3246
812	54.000	92.000	23.000	920.00	2834.0	0.3246
813	54.000	92.000	23.000	920.00	2834.0	0.3246
814	54.000	92.000	23.000	920.00	2834.0	0.3246
815	54.000	92.000	23.000	920.00	2834.0	0.3246
816	54.000	92.000	23.000	920.00	2834.0	0.3246
853	35.000	91.000	21.000	1880.0	2129.0	0.8830
854	35.000	91.000	21.000	1880.0	2129.0	0.8830
855	35.000	91.000	21.000	1880.0	2129.0	0.8830
856	35.000	91.000	21.000	1880.0	2129.0	0.8830
857	35.000	91.000	21.000	1880.0	2129.0	0.8830
858	35.000	91.000	21.000	1880.0	2129.0	0.8830
859	35.000	91.000	21.000	1880.0	2129.0	0.8830
860	35.000	91.000	21.000	1880.0	2129.0	0.8830
861	35.000	91.000	21.000	1880.0	2129.0	0.8830
862	35.000	91.000	21.000	1880.0	2129.0	0.8830
863	35.000	91.000	21.000	1880.0	2129.0	0.8830
864	35.000	91.000	21.000	1880.0	2129.0	0.8830
925	41.000	91.000	20.000	1590.0	3994.0	0.3981
926	41.000	91.000	20.000	1590.0	3994.0	0.3981

927	41.000	91.000	20.000	1590.0	3994.0	0.3981
928	41.000	91.000	20.000	1590.0	3994.0	0.3981
929	41.000	91.000	20.000	1590.0	3994.0	0.3981
930	41.000	91.000	20.000	1590.0	3994.0	0.3981
931	41.000	91.000	20.000	1590.0	3994.0	0.3981
932	41.000	91.000	20.000	1590.0	3994.0	0.3981
933	41.000	91.000	20.000	1590.0	3994.0	0.3981
934	41.000	91.000	20.000	1590.0	3994.0	0.3981
935	41.000	91.000	20.000	1590.0	3994.0	0.3981
936	41.000	91.000	20.000	1590.0	3994.0	0.3981
961	44.000	91.000	26.000	945.00	2800.0	0.3375
962	44.000	91.000	26.000	945.00	2800.0	0.3375
963	44.000	91.000	26.000	945.00	2800.0	0.3375
964	44.000	91.000	26.000	945.00	2800.0	0.3375
965	44.000	91.000	26.000	945.00	2800.0	0.3375
966	44.000	91.000	26.000	945.00	2800.0	0.3375
967	44.000	91.000	26.000	945.00	2800.0	0.3375
968	44.000	91.000	26.000	945.00	2800.0	0.3375
969	44.000	91.000	26.000	945.00	2800.0	0.3375
970	44.000	91.000	26.000	945.00	2800.0	0.3375
971	44.000	91.000	26.000	945.00	2800.0	0.3375
972	44.000	91.000	26.000	945.00	2800.0	0.3375
985	46.000	91.000	25.000	934.00	3773.0	0.2475
986	46.000	91.000	25.000	934.00	3773.0	0.2475
987	46.000	91.000	25.000	934.00	3773.0	0.2475
988	46.000	91.000	25.000	934.00	3773.0	0.2475
989	46.000	91.000	25.000	934.00	3773.0	0.2475
990	46.000	91.000	25.000	934.00	3773.0	0.2475
991	46.000	91.000	25.000	934.00	3773.0	0.2475
992	46.000	91.000	25.000	934.00	3773.0	0.2475
993	46.000	91.000	25.000	934.00	3773.0	0.2475
994	46.000	91.000	25.000	934.00	3773.0	0.2475
995	46.000	91.000	25.000	934.00	3773.0	0.2475
996	46.000	91.000	25.000	934.00	3773.0	0.2475
1009	48.000	91.000	20.000	682.00	1780.0	0.3831
1010	48.000	91.000	20.000	682.00	1780.0	0.3831
1011	48.000	91.000	20.000	682.00	1780.0	0.3831
1012	48.000	91.000	20.000	682.00	1780.0	0.3831
1013	48.000	91.000	20.000	682.00	1780.0	0.3831
1014	48.000	91.000	20.000	682.00	1780.0	0.3831
1015	48.000	91.000	20.000	682.00	1780.0	0.3831
1016	48.000	91.000	20.000	682.00	1780.0	0.3831
1017	48.000	91.000	20.000	682.00	1780.0	0.3831
1018	48.000	91.000	20.000	682.00	1780.0	0.3831
1019	48.000	91.000	20.000	682.00	1780.0	0.3831
1020	48.000	91.000	20.000	682.00	1780.0	0.3831
1021	49.000	91.000	23.000	796.00	2516.0	0.3164
1022	49.000	91.000	23.000	796.00	2516.0	0.3164
1023	49.000	91.000	23.000	796.00	2516.0	0.3164
1024	49.000	91.000	23.000	796.00	2516.0	0.3164
1025	49.000	91.000	23.000	796.00	2516.0	0.3164
1026	49.000	91.000	23.000	796.00	2516.0	0.3164
1027	49.000	91.000	23.000	796.00	2516.0	0.3164
1028	49.000	91.000	23.000	796.00	2516.0	0.3164
1029	49.000	91.000	23.000	796.00	2516.0	0.3164
1030	49.000	91.000	23.000	796.00	2516.0	0.3164
1031	49.000	91.000	23.000	796.00	2516.0	0.3164
1032	49.000	91.000	23.000	796.00	2516.0	0.3164
1045	51.000	91.000	31.000	1343.0	6015.0	0.2233
1046	51.000	91.000	31.000	1343.0	6015.0	0.2233
1047	51.000	91.000	31.000	1343.0	6015.0	0.2233
1048	51.000	91.000	31.000	1343.0	6015.0	0.2233
1049	51.000	91.000	31.000	1343.0	6015.0	0.2233
1050	51.000	91.000	31.000	1343.0	6015.0	0.2233
1051	51.000	91.000	31.000	1343.0	6015.0	0.2233
1052	51.000	91.000	31.000	1343.0	6015.0	0.2233
1053	51.000	91.000	31.000	1343.0	6015.0	0.2233

1054	51.000	91.000	31.000	1343.0	6015.0	0.2233
1055	51.000	91.000	31.000	1343.0	6015.0	0.2233
1056	51.000	91.000	31.000	1343.0	6015.0	0.2233
1069	53.000	91.000	22.000	896.00	2639.0	0.3395
1070	53.000	91.000	22.000	896.00	2639.0	0.3395
1071	53.000	91.000	22.000	896.00	2639.0	0.3395
1072	53.000	91.000	22.000	896.00	2639.0	0.3395
1073	53.000	91.000	22.000	896.00	2639.0	0.3395
1074	53.000	91.000	22.000	896.00	2639.0	0.3395
1075	53.000	91.000	22.000	896.00	2639.0	0.3395
1076	53.000	91.000	22.000	896.00	2639.0	0.3395
1077	53.000	91.000	22.000	896.00	2639.0	0.3395
1078	53.000	91.000	22.000	896.00	2639.0	0.3395
1079	53.000	91.000	22.000	896.00	2639.0	0.3395
1080	53.000	91.000	22.000	896.00	2639.0	0.3395
1081	54.000	91.000	22.000	920.00	2850.0	0.3228
1082	54.000	91.000	22.000	920.00	2850.0	0.3228
1083	54.000	91.000	22.000	920.00	2850.0	0.3228
1084	54.000	91.000	22.000	920.00	2850.0	0.3228
1085	54.000	91.000	22.000	920.00	2850.0	0.3228
1086	54.000	91.000	22.000	920.00	2850.0	0.3228
1087	54.000	91.000	22.000	920.00	2850.0	0.3228
1088	54.000	91.000	22.000	920.00	2850.0	0.3228
1089	54.000	91.000	22.000	920.00	2850.0	0.3228
1090	54.000	91.000	22.000	920.00	2850.0	0.3228
1091	54.000	91.000	22.000	920.00	2850.0	0.3228
1092	54.000	91.000	22.000	920.00	2850.0	0.3228

Appendix D

Figure D-1
Histogram (AFMC and SPC Bases)

Figure D-2

Box and Whisker Plot (AFMC and SPC Bases)

Figure D-3
Wilk-Shapiro/Rankit Plot (AFMC and SPC Bases)

Figure D-4
Scatter Plot: MBTU vs. HDD (AFMC and SPC Bases)

Figure D-5
Scatter Plot: MBTU vs. CDD (AFMC and SPC Bases)

Figure D-6
Scatter Plot: MBTU vs. CHDD (AFMC and SPC Bases)

Figure D-7
Scatter Plot: MBTU vs. SQFT (AFMC and SPC Bases)

Figure D-8
Plot of Fitted Values vs. Standardized Residuals (AFMC and SPC Bases)

Figure D-9
Wilk-Shapiro Plot of Standardized Residuals (AFMC and SPC Bases)
Appendix E

Figure E-1
Histogram (AMC and ACC Bases)

Figure E-2
Box and Whisker Plot (AMC and ACC Bases)

Figure E-3
Wilk-Shapiro/Rankit Plot (AMC and ACC Bases)

Figure E-4
Scatter Plot: MBTU vs. HDD (AMC and ACC Bases)

Figure E-5
Scatter Plot: MBTU vs. CDD (AMC and ACC Bases)

Figure E-6
Scatter Plot: MBTU vs. CHDD (AMC and ACC Bases)

Figure E-7
Scatter Plot: MBTU vs. SQFT (AMC and ACC Bases)

Figure E-8
Plot of Fitted Values vs. Standardized Residuals (AMC and ACC Bases)

Figure E-9
Wilk-Shapiro Plot of Standardized Residuals (AMC and ACC Bases)
Appendix F

Figure F-1
Histogram (AETC and ACC Bases)

Figure F-2
Box and Whisker Plot (AETC and ACC Bases)

Figure F-3
Wilk-Shapiro/Rankit Plot (AETC and ACC Bases)

Figure F-4
Scatter Plot: MBTU vs. HDD (AETC and ACC Bases)

Figure F-5
Scatter Plot: MBTU vs. CDD (AETC and ACC Bases)

Figure F-6
Scatter Plot: MBTU vs. CHDD (AETC and ACC Bases)

Figure F-7
Scatter Plot: MBTU vs. SQFT (AETC and ACC Bases)

Figure F-8
Plot of Fitted Values vs. Standardized Residuals (AETC and ACC Bases)

Figure F-9
Wilk-Shapiro Plot of Standardized Residuals (AETC and ACC Bases)
Appendix G

Figure G-1
Histogram (ACC Bases)

Figure G-2
Box and Whisker Plot (ACC Bases)

Figure G-3
Wilk-Shapiro/Rankit Plot (ACC Bases)

Figure G-4
Scatter Plot: MBTU vs. HDD (ACC Bases)

Figure G-5
Scatter Plot: MBTU vs. CDD (ACC Bases)

Figure G-6
Scatter Plot: MBTU vs. CHDD (ACC Bases)

Figure G-7
Scatter Plot: MBTU vs. SQFT (ACC Bases)

Figure G-8
Plot of Fitted Values vs. Standardized Residuals (ACC Bases)

Figure G-9
Wilk-Shapiro Plot of Standardized Residuals (ACC Bases)
Appendix H

Figure H-1
Histogram (ACC Bases w/ Supplemental Data)

Figure H-2
Box and Whisker Plot (ACC Bases w/ Supplemental Data)

Figure H-3
Wilk-Shapiro/Rankit Plot (ACC Bases w/ Supplemental Data)

Figure H-4
Scatter Plot: MBTU vs. HDD (ACC Bases w/ Supplemental Data)

Figure H-5
Scatter Plot: MBTU vs. CDD (ACC Bases w/ Supplemental Data)

Figure H-6
Scatter Plot: MBTU vs. CHDD (ACC Bases w/ Supplemental Data)

Figure H-7
Scatter Plot: MBTU vs. SQFT (ACC Bases w/ Supplemental Data)

Figure H-8
Scatter Plot: MBTU vs. AGE (ACC Bases w/ Supplemental Data)

Figure H-9
Scatter Plot: MBTU vs. MAINT (ACC Bases w/ Supplemental Data)

Figure H-10
Plot of Fitted Values vs. Standardized Residuals (ACC Bases w/ Supplemental Data)

Figure H-11
Wilk-Shapiro Plot of Standardized Residuals (ACC Bases w/ Supplemental Data)
Appendix I

Figure I-1
Histogram (Nonflying Bases)

Figure I-2
Box and Whisker Plot (Nonflying Bases)

Figure I-3
Wilk-Shapiro/Rankit Plot (Nonflying Bases)

Figure I-4
Scatter Plot: MBTU vs. HDD (Nonflying Bases)

Figure I-5
Scatter Plot: MBTU vs. CDD (Nonflying Bases)

Figure I-6
Scatter Plot: MBTU vs. CHDD (Nonflying Bases)

Figure I-7
Scatter Plot: MBTU vs. SQFT (Nonflying Bases)

Figure I-8
Plot of Fitted Values vs. Standardized Residuals (Nonflying Bases)

Figure I-9
Wilk-Shapiro Plot of Standardized Residuals (Nonflying Bases)

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Vita

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